# MONTANA - STATE OVERVIEW

## The People

Geographically, Montana is our nation's fourth-largest state, yet in terms of population, we're about the size of a small American city - estimated to be 926,865 in 2004. That makes six people for every square mile. Although the ratio of urban to rural dwellers in Montana is nearly 50/50, Montana's urban population is growing.

As in 1991, Billings is still the largest city in the state with a population of 95,220 inhabitants, and Ismay is still the smallest town with 26 inhabitants. While the Billings population has grown significantly, Ismay still has the same population it had in 1991! Approximately one-third of Montanans are located in six major cities: Billings, Missoula, Great Falls, Butte, Bozeman and Helena.

Montana has eleven Indian tribes living on seven reservations. Together they make up about 6.5% of Montana's population while other minorities combine for approximately 4.7% of the population.

Livestock and wildlife actually outnumber the people in Montana - there are three cows for every person. Also, Montana supports the largest grizzly bear population south of Canada and the largest elk herd in the nation!

## Agriculture and Business

Montana's four largest industries are agriculture, which includes both crops and livestock; travel and tourism; timber, and mining. Our leading agricultural commodities are cattle and calves, wheat, barley, dairy products, sugar beets, hay, hogs, sheep and lambs. The mining industry includes coal production, petroleum, precious metals and natural gas. Montana is one of just three places in the world where platinum and palladium are mined.

Montana is a large, sparsely populated state with an economy that has traditionally depended on natural resource-linked industries. Recent years, however, have seen the state relying less on its natural resources, and branching out into a more diversified economy. Many more service-producing jobs are being added to Montana's economy than are goods-producing jobs.

Tourism is becoming more important to the state's economy - 4.2 million visitors leaving $1.87 billion dollars to our economy last year. Most visited Yellowstone and Glacier National Parks, the Little Bighorn Battlefield and Flathead Lake, but the state’s natural beauty, fishing, hunting and other opportunities were also popular.

Because Montana offers a unique blend of business opportunities, skilled workers, and a modern infrastructure for an unrivaled quality of life, some exciting, high tech industries are emerging. In the future, if you look up into the Big Sky, you may see the X-33, Lockheed Martin’s prototype space shuttle preparing to land at a Montana spaceport. Included among advanced technologies prospering Montana are silicon wafers, software design, laser-electro optics, environmental technology, biotechnology and applied research. In the small prairie

town of Poplar, West Electronics makes printed circuit boards and wiring harnesses for the armed forces and major corporations. To the west in Ronan, S & K Electronics makes electronic components for government and private clients.

**Geography and Climate**

Montana is a word derived from the Spanish word meaning "mountainous". It is often termed the "Treasure State" and "Big Sky Country." All these nicknames refer to the beautiful and divergent landscapes encompassed within the boundaries of Montana.

The Indians called it the "backbone of the world". The Continental Divide runs along the crests of the Rocky Mountains from Canada to Mexico, literally dividing the waters of the North American continent. Montana is known as a headwaters state because much of the water that flows to the rest of the nation comes from the mountains of Montana.

Montana is a vast and varied state of mountains, canyons, river valleys, forests, grassy plains, badlands, and caverns. Its "Big Sky" covers a land area of more than 147,000 square miles, making Montana the fourth largest state in the nation. In area, it can accommodate Virginia, Maryland, Delaware, Pennsylvania, and New York, and still have room for the District of Columbia.

The eastern third of the state is plains country where the sky seems to find no limits. The central third is plains surrounding what are called "island" mountain ranges, and the western third, mountain ranges and valleys.

The highest point in Montana is Granite Peak in the Beartooth Mountains at 12,799 feet. The lowest point is in northwestern Montana, where the Kootenai River leaves Montana at 1,800 feet. Montana's two largest lakes are the Flathead (largest freshwater lake west of the Mississippi) and Fort Peck, a manmade lake with over 1,500 miles of shoreline! The Roe River near Great Falls is recognized by the Guinness Book of World Records as the world's shortest river (200 feet).

In the southern central portion of the state is Yellowstone National Park with the world's most extensive area of geyser activity, harboring more than 10,000 thermal features. In the northwestern corner is Glacier National Park where spectacular mountain peaks were cut by glaciers.

The coldest temperature ever recorded in Montana was -70 degrees below zero at Rogers Pass north of Helena, on January 20, 1954 - a national record for the lower 48 states. The warmest temperature ever recorded in Montana was 117 degrees at Glendive, July 20, 1893, and at Medicine Lake, on July 5, 1937.

The ***world record*** for a 24-hour temperature change occurred in Loma on January 15, 1972. The temperature rose exactly 103 degrees, from 54 degrees below zero to 49 degrees above zero.

**Government**

After Congress made Montana a territory in May 1864, the delegates to the First Legislative Assembly gathered in December of that year in a dirt-roofed cabin in Bannack City. During the next sixty days, the assembly passed seven hundred pages of laws and chose nearby Virginia City as the new capital of Montana Territory.

Montana remained a territory for twenty-five years. It was not until the federal government passed the Enabling Act of 1889 and the voters of Montana Territory ratified a new constitution that Montana was admitted into the Union as the 41st state.

The selection of Helena as the capital of Montana had an inauspicious beginning. A political war between two "Copper Kings", Marcus Daly and William Clark, resulted in massive bribery and vote-buying scandals only a "Copper King" could afford. With Daly backing Anaconda and Clark supporting Helena, it is estimated that in 1894 each man spent almost $3 million to determine which city would become Montana's new capital.

There are 56 counties, 126 incorporated cities and towns, and two consolidated city-county governments in Montana. Nine local governments operate under the "commission-manager" form of government, including five of the state's largest cities. The majority of cities continue with the "commission-executive" form also known as the "mayor-council" form and most counties retain the traditional "commission" form.

The Montana Legislature has 50 senators and 100 representatives elected from single-member districts. The legislature meets at regular biennial sessions for 90 days in odd-numbered years.

Montana has three presidential electoral votes. Members of Congress are U.S. Senators Max Baucus (D) and Conrad Burns (R) and U.S. Representative Dennis Rehberg (R).

# MONTANA EMS SYSTEM - OVERVIEW

## Authorizing Statutes

The Department of Public Health and Human Services (Department) is given broad responsibility in MCA 50-6-102 for the development of a comprehensive emergency medical services system for Montana. The intent of this statute was to eliminate the repeated loss of persons who die unnecessarily because necessary life-support personnel and equipment are not available to victims of accidents and sudden illness.

Not a comprehensive act for EMS system development, this is one of five authorizing statutes in Title 50, Chapter 6 of Montana Code Annotated (appendix A):

Part 1 - Development of a Program - Provides authority for the Department to plan and implement a statewide EMS program.

Part 2 - Emergency Medical Technicians - Authorizes the Montana Board of Medical Examiners (BOME), Department of Labor and Industry to implement a program(s), including but not limited to, training and certification of Emergency Medical Technicians and administration of drugs. The BOME is responsible for all education, training and certification of Emergency Medical Technicians at all levels.

Part 3 - Ambulance Service Licensing - Authorizes the Department to establish minimum uniform standards for the operation of emergency medical services.

Part 4 - State Trauma Care System - Authorizes the Department to develop and adopt a statewide trauma care system plan and a state trauma register.

Part 5 - Automatic External Defibrillator Program - Authorizes the Department to develop rules relative to the use of AEDs.

While the BOME is statutorily responsible for EMT licensure, a joint agreement entrusted the Department with the day to day administration of the EMT program until early 2004. It was at that time that the BOME again assumed direct and complete oversite of the EMT program including:

- trains Lead Instructors (persons who coordinate EMT provider training);
- approves EMT training courses and training programs;
- coordinates the conduct of written and practical examinations;
- develops and implements rules relative to EMT training and licensure;
- liaisons with the National Registry of EMTs for written exams;
- develops and approves protocols;
- investigates complaints about EMT performance, EMT courses and medical directors

## Synopsis of Other Laws and Rules

EMS service licensing rules (unofficial draft - due to be filed on June 20th) - Appendix D
These proposed rules accommodate the BOME's rules adopted in 2004 which defined

responsibility for medical directors, add endorsement levels of care. Since the licensing rules have not been edited since 1990, numerous other administrative changes are being made also.

Board of Medical Examiners statutes affecting EMTs (Title 37 chapter 1 parts, 1, 2 and 3) (Appendix B)
The statutes that apply to the Board govern the processes for examination, licensure, duties of the board, licensing investigation, disciplinary authority and process, and injunctive powers, sanctions, denial of license, reinstatement of license, unprofessional conduct, military exemptions, non-renewal of license, scope, out-of-state applicants, temporary permits, setting licensure fees, commensurate with cost and board authority.

Board of Medical Examiner rules affecting EMTs (updated January 2004) (Appendix B)
The rules that govern and establish the scope of practice, scope of education and qualifications for licensure of levels of EMTs. This includes First Responders, Basic, Intermediate-99 and Paramedic. They identify qualifications for lead instructors and the Board offers a specific lead instructor course four times per year around the state. They create an endorsement process to grant specific skills within the various levels of provider. They identify and establish qualifications for medical director's role and responsibility and oversight of patient care. The rules further identify and define educational programs and course approval processes. They establish grounds for unprofessional conduct. The rules allow for an exemption from state licensure when personnel are on federally managed incidents, the utilization of personal auto injectors on WMDs and waste management.

Living will law (EMS portions) (unchanged since the last assessment) - Appendix G
The EMS portion allows the Department to adopt a uniform form and method of reliable documentation for terminal patients with living wills who do not want to be resuscitated. The Comfort One® protocol, adopted by the Board, guides the treatment by EMS providers when their patients have reliable documentation.

Living will rules (essentially unchanged since the last assessment) - Appendix G
Implements the Comfort One® program for identification of terminally ill patients with living wills. Also extends the Comfort One® protocol and identification to patients without living wills, but who have physician DNR orders.

Medical director liability protection law (unchanged since the last assessment) - Appendix H
Provides liability protection to off-line medical directors, providing their compensation specifically for being off-line medical director does not exceed $5,000 per year. There is also limited liability protection for on-line personnel.

Unprotected exposure law (unchanged since the last assessment) - Appendix I
Provides that persons who have sustained an unprotected exposure may file a standard report with the medical facility. The prehospital provider will be notified if the patient is tested for several diseases and is found to be positive. The exposure report form is also included in this appendix.

Unprotected exposure rules (unchanged since the last assessment) - Appendix I
The rules and form which implement the above legislation.

Good Samaritan law (unchanged since the last assessment) - Appendix J
Provides liability protection to persons who render emergency care in good faith and without compensation.

Two mill levy law (unchanged since the last assessment) - Appendix K
Local governments may levy up to two mills to support ambulance service.

## EMS & TRAUMA SYSTEM SECTION - OVERVIEW

The ***Mission*** of Montana's EMS & Trauma Systems Program is to implement a sustainable, comprehensive emergency medical and trauma system for Montanans that measurably prevents and reduces morbidity and mortality.

It is ***Our Vision*** that the development of a comprehensive emergency medical service, trauma and injury prevention program is imperative to the social well-being and health and safety of Montana citizens and that every Montana citizen and visitor who experiences a medical illness or injury will have access to state-of-the-art emergency medical care prior to and upon arrival at a medical care facility.

In order to accomplish this, all involved organizations, agencies and individuals need to work together cooperatively to ensure that the following system components are developed and implemented:

**Funding and Policy** - Provide an effective system of emergency medical care with enabling legislation that provides for a lead EMS agency and dedicated funding to adequately support the mission.

**Resources Management** - Provide central coordination and current knowledge of system resources and their status to maintain an effective EMS response.

**EMS Education** - This mission will only be accomplished if EMS personnel are adequately trained and available in sufficient numbers throughout the State.

**EMS Services & Medical Response to Disasters** - Ensure that Emergency Medical Services personnel and equipment are delivered to the scene in a safe and timely manner; and as necessary, patients are transported at an appropriate level of care to and between appropriate facilities.

**Facilities** - Assure that a patient's needs are identified early and transfer to an appropriate level of care is accomplished in a timely manner.

**Communications** - Provide for a communications system that encompasses public access to EMS, interagency communications, medical control and coordination of resources.

**Public Information, Education and Prevention / Injury Prevention** - Develop and implement an effective, outcome-oriented EMS public information, education and prevention program.

**Medical Direction** - Assure physicians are consistently involved and provide leadership at all levels of the EMS system.

**Trauma Systems** - Provide a quality, effective system of trauma care and injury prevention integrated with the overall EMS system.

**Evaluation and Quality Improvement** - Provide for a comprehensive quality management program that improves planning, implementation and monitoring of a statewide EMS system.

The EMS&TS Section is one of four programs (including Diabetes Management /Cardiovascular Health, Tobacco Use Prevention and Cancer Control) in the Chronic Disease & Health Promotion Bureau

## EMS & Trauma System Section - Staff

**Jim DeTienne – Section Supervisor**

- overall supervision of the Section
- manages Section budgets, funding, and contracts
- coordinates grant procurement and management activities
- represents the Department on various committees and task forces

**Vacant – EMS System Manager**

- plans and implements the prehospital data collection system
- manages the development of a management and resource database
- manages the EMS Plan and strategic planning process
- supervises the EMS licensing and enforcement program
- manages the poison control system
- administers homeland security grants funding and programs
- manages the Comfort One program
- serves as the Section's liaison to the Montana Board of Medical Examiners training program

**Kim Todd – Trauma System Manager**

- manages day-to-day development of the statewide trauma system
- coordinates implementation of the Montana Trauma System Plan
- coordinates administration of the state trauma registry
- coordinates regional and statewide quality/performance improvement activities
- meets quarterly with the Regional Trauma Advisory and State Trauma Committee
- oversees the statewide injury prevention and control program
- provides technical expertise and assistance to Montana hospitals through consultation visits

- facilitates trauma related education offerings
- administers HRSA trauma grant
- manages the Advanced Trauma Life Support program

**Thom Danenhower – Injury Prevention Coordinator**

- serves as the Section's injury prevention and control coordinator
- serves as the EMS-C program coordinator
- provides technical assistance in the design and evaluation of injury prevention and control activities
- implements the Injury Prevention and Control Plan
- administers and manages the HRSA Partnership grant
- administers and manages the CDC Fire Injury grant.

**Pam Scott – EMS Licensing Manager**

- manages day-to-day operation of EMS transportation program including licensing and inspections
- serves as the Section's enforcement officer. Investigates complaints or enforcement actions that may be necessary
- assists with writing and adoption of licensing rules
- manages unprotected exposure program
- administers the HRSA AED grant

**Pam LaFountaine – Data Manager**

- database technician for the trauma register
- database technician for the office management database
- database technician for the CDC fire grant and others
- generates various program statistics and other database query activities
- backup to the administrative assistant

**Diana Howard – Administrative Assistant**

- serves as Section receptionist
- provides clerical services for Section staff
- assists with preparation of various meetings
- assist staff and others with various travel needs
- coordinates office purchasing and payment systems
- coordinates entry of section budgets into projection spreadsheets
- provides office management functions.

## Funding

EMS General Fund – $339,651.00

Trauma General Fund – $138,451.00

Poison Control General Fund - $38,954 (only for this biennium - then this is added directly to the general fund after July 1, 2005)

PHB Block Grant - $180,000

HRSA Trauma Grant – 3 year grant (8/1/2002 – 7/31/2005) at $40,000 / year

HRSA Partnership Grant – Continuing grant at $100,000 / year

CDC Fire Grant – Continuing grant, presently at $145,139 for FY 2005

HRSA AED Grant – 3 year grant (09/01/2003 – 08/31/2006) - $222,9500 for FY 05

P-25 Project - $250,000 CDC bio-terrorism funds dedicated to the NE MT radio project and another $250,000 through HRSA Hospital Bioterrorism grant funds.

## Current Programs, Projects and Responsibilities

Management of a statewide EMS system - The Department is statutorily responsible for development and management of the State's EMS, injury prevention and trauma system programs.

EMS Service Licensing and Enforcement - The Section manages the EMS service inspection and licensing program (non-transporting units, air and ground ambulance services), coordinates the statewide EMS transportation system and coordinates enforcement activities. Activities include approval of license applications, inspections, and technical support to services for a broad range of EMS and transportation issues. Additionally, complaints about EMS services are investigated and enforced as needed.

Trauma System Development - This program is responsible for the planning and oversight of the Montana Trauma Care System including: facility, regional, and statewide system development; statewide trauma registry development and data analysis; regional and statewide system evaluation and quality improvement; trauma center consultation and designation; trauma education and technical assistance to medical personnel and facilities; public information and injury prevention. A revised trauma plan and trauma rules are being adopted. Quarterly meetings of a state Trauma Care Committee and three regional trauma committees facilitate ongoing planning and quality improvement for the trauma system.

Injury Prevention - The goal of this program is to reduce Montana's very high injury and death rates. The Injury Prevention and Control coordinator gathers and analyzes information from multiple data sources to identify where and how the injuries are occurring; to design injury prevention and control strategies; and to evaluate and improve both the programmatic and cost effectiveness of the prevention strategies. The Coordinator works cooperatively with and leads organizations, agencies, health care institutions, health care providers and others to implement and to evaluate injury prevention and control programs consistent with data-driven, injury prevention and control plan.

Emergency Medical Services for Children - This grant funded program focuses on improving pediatric emergency care, especially for special populations of children. As this program emphasizes pediatric injury prevention, many of the efforts are focused on family centered

care and family advocacy, inclusion of pediatric care components in plan documents and improving care for special needs children. There is also a significant emphasis on training of medical professionals, coalition building, data collection, and comprehensive planning.

Poison Control System - The Montana Poison Control system provides assistance to over 12,000 callers per year. Montana contracts with the Rocky Mountain Poison and Drug Center (RMPDC) in Denver to provide expert poison information and management services to Montana citizens and visitors and to provide clinical toxicological services to Montana's health care professionals. The Department provides a toll-free telephone line for citizen access, widely advertises the number and provides poison information and prevention materials to Montana citizens.

Comfort One Program - The Section administers the COMFORT ONE, prehospital Do-Not Resuscitate Program for terminally ill and seriously ill patients (day-to-day administration is by the Montana Hospital Association through an MOU). Administrative rules and procedures are in place and COMFORT ONE documents and materials are made available to physicians to issue to their patients.

Unprotected Exposure Program - Administration of rules which allow physicians to report information about certain diseases to prehospital providers who may have sustained an unprotected exposure to the blood or body fluids of a patient. The Section makes report forms available to facilities and services and coordinates implementation of the program.

P-25 Radio Project - Per a bill passed during the 2003 legislature, the Section is managing a demonstration EMS radio project for hospitals and ambulance services in northeastern Montana. Bioterrorism funding has also been procured to inventory areas and to install P-25 communications as needed. Additional HRSA hospital bioterrorism funds have been received to expand radios to other areas of the state.

Prehospital Data Project - This project, to be phased in over several years, will facilitate collection of prehospital care data, a critical need for our EMS system. This project includes development of web-based data collection software for local services and the state, followed by comprehensive education on how to use that data for management and quality improvement activities. Eventually, this will support a 'services of excellence' program to support and move EMS services to a more comprehensive public health approach to delivering services.

Advanced Trauma Life Support - Co-sponsored by the Section, the Montana Committee on Trauma, trauma regions and several hospitals, this course for physicians and physician extenders is offered 4 times per year in several locations around the state.

Bioterrorism - Current funding sources are being utilized to assist with planning, education and supplies to enable EMS and trauma services to be better prepared for bioterrorism and disasters. Current projects include providing disaster equipment and supplies to EMS services' development of a response system for mass casualty incidents, development of a statewide communications plan and development of statewide mutual aid agreements.

**Grant Funded Programs**

HRSA Trauma Grant - Now in the third year of a three-year grant, this grant implements a statewide trauma register. The grant supports software education and ongoing planning efforts for a comprehensive data-driven, quality improvement based trauma system.

MCH Partnership Grant - Now in the third year of a continuing grant, this funding supports statewide injury prevention activities including development of an injury prevention plan, suicide prevention strategies, an open water drowning prevention campaign, pediatric injury prevention, bike safety helmet programs and collaboration with numerous groups.

CDC Fire Grant - Presently in the third of three years of funding, this grant facilitates collaboration with several fire departments around the state to target residential occupancies for long-life smoke alarm installation and home fire and injury prevention education. Fall hazard safety education is also conducted in senior homes at the same time.

HRSA AED Grant - A three year rural access to emergency devices grant which is designed to achieve improved outcomes from witnessed cardiac arrests by providing education and AEDs to EMS personnel in rural areas of Montana.

## BOARD OF MEDICAL EXAMINERS - OVERVIEW

The Board of Medical Examiners is statutorily established pursuant to Title 2, Chapter 15, Part 17. The Board consists of 11 members appointed by the Governor with consent of the Senate. There are five (5) Medical Doctors, one (1) Doctor of Osteopathy, one (1) Doctor of Podiatric Medicine, one (1) licensed Nutritionist, one (1) licensed Physician Assistant (PA), and two (2) public members who are not medical practitioners. The members serve 4-year staggered terms. The Board is allocated to the Department of Labor and Industry for administrative purposes pursuant to 2-15-121, MCA. Statutorily the Board has an Executive Secretary. The Board has seven other staff members directly funded by the Board, (1) program manager, (1) EMT training coordinator, two (2) attorneys and (3) licensing specialists. There are a minimum of five other staff members funded by the board based on the allocation of time distribution which provide needed services and administrative or technical support. These duties include but are not limited to, budgeting and accounting functions, compliance and investigative functions, rules, policies and procedures.

The Board is authorized to license, regulate and discipline Medical Doctors, Doctors of Osteopathy, Podiatry, Physician Assistants, Nutritionists, Acupuncturists, medical assistants, and all pre-hospital care providers (In Montana EMT is generic for all levels).

The Board's funding mechanism is solely based on licensure and administrative fees charged to licensees. These fees must be established commensurate with costs of the board programs pursuant to Title 37, Chapter 1, Part 134. The Board receives no general fund money nor grants.

# A. REGULATION AND POLICY - FUNDING AND POLICY

**Standard**

To provide a quality, effective system of emergency medical care, each EMS system must have in place comprehensive, enabling legislation with provision for a lead EMS agency. This agency has the authority to plan and implement an effective EMS system and to promulgate appropriate rules and regulations for each recognized component of the EMS system.

There is a consistent, established funding source to adequately support the activities of the lead agency and other essential resources which are necessary to carry out the legislative mandate.

The lead agency operates under a single, clear management structure for planning and policy setting, but strives to achieve consensus among EMS constituency groups in formulating public policy, procedures and protocols.

The role of any local/regional EMS agencies or councils who are charged with implementing EMS policies is clearly established, as well as their relationship to the lead agency.

Supportive management elements for planning and developing effective statewide EMS systems include the presence of a formal EMS Medical Director, a Medical Advisory Committee for review of EMS medical care issues and an EMS Advisory Committee (or Board). The EMS Advisory Committee has a clear mission, specified authority and representative membership from all disciplines involved in the implementation of EMS systems.

## Where We Are

### In 2004, Montana's EMS system underwent several radical changes.

Responsibilities for EMS and EMTs under the Board of Health, Department of Justice and Board of Medical Examiners were all combined under the Department of Health (many years ago). This continued until 2004 when the Board assumed control of their authority and oversite for EMTs again.

While the Montana Board of Medical Examiners (located in the Department of Labor and Industry) had always had statutory responsibility granted to them by the legislature for the education, training and licensing of pre-hospital personnel (MCA 50-6-201 through 207 - Appendix B), the actual day to day operation was retained by the Montana Board of Medical Examiners in February 2004.

This was a period of numerous changes for local and State EMS systems and EMTs:

- There's no longer "one stop shopping" for EMS and EMT issues and providers are faced with "who to call" for their issues and questions.

- Concurrent with the transfer of the EMT program, two full-time positions from the EMS&TS Section were moved to the Board - decreasing the EMS&TS Section's staff from nine to seven.

- Under the Department, the exam process was provided through centralized, state-administered exams. The BOME decided to no longer sponsor centralized examinations for licensure. As such, EMT examinations, both written and practical, are currently conducted locally under the supervision of the course medical director.

- New rules adopted by the BOME brought EMT-First Responder under their authority (previously a certification in the Department of Public Health) and endorsement levels of care were defined authorized above all levels of EMT.

**The EMSTS Section also underwent radical change**. While many of the changes implemented by the BOME, such as local exams and medical control responsibilities, had been considered and pondered previously by the Section, it was never able to step out of the box and implement such change. Limited staff, heavy workloads and legislative priorities just never fed the winds of change.

The loss of staff was disconcerting, but the elimination of the exam process and other BOME responsibilities allows remaining staff to concentrate on system planning and technical assistance issues. As the only context in which many EMS personnel had contact with the Section previously was the EMT exam, many viewed the loss of the EMT program as a 'death blow' to the Section. Contrarily, this change has proven to be the springboard to planning and implementing all the components of an EMS system and provide a broader service to providers.

Such change allows radical changes to the EMSTS's organizational structure role and responsibility to the EMS community. Previously, responsibility for technical assistance and regulation was fraught with conflict. With limited staff, the same person that assisted a community with conducting an EMT course was the same person that would later be instrumental in 'pass, not pass' decisions of the students in that course.

**While regulatory responsibilities still remain, the Section can now place substantial effort and emphasis on technical assistance aspects of developing an EMS system**, rather than dealing primarily with EMT testing issues. The Section has also been able to implement a statewide planning process with a performance-based approach. This approach will produce an action and results-oriented EMS System Plan. To further enhance the organizational structure and the mission of the Section, staffing roles need to be reviewed and job descriptions modified as appropriate. With limited staff and resources, the Section needs to evaluate how non-agency resources and relationships could enhance the technical and clinical expertise available to meet needs of the State.

The roles of the Section, for overall planning and development of the EMS system, and the BOME, for EMT training and licensing, will need to be coordinated to assure that both agencies work together to share resources and eliminate duplication.

**Beginning in early 2004, an EMS System Task Force (Appendix L) was assembled** to identify statewide issues and to help develop an EMS System Plan with achievable goals, measurable objectives and action steps. As in this document, the plan will include ***where we are now*** and ***future directions*** sections. The Montana plan will represent a fluid strategic planning process which can react to changing times and priorities.

A review of the previous NHTSA assessment reveals that, although major improvements have been made in the overall EMS system, numerous recommendations for the EMS system remain unchanged or undeveloped. Funding, staffing and workloads are all issues which effected this, but the current reorganization of Section and commitment to a broad strategic planning process will place continued emphasis on prioritizing challenges and developing solutions to issues. Input provided by the EMS System Task Force and recommendations of this assessment will be incorporated into an EMS System Plan - and a continued strategic planning process - which will assure ongoing progress with system issues and needs.

To this end, the task force members have come together quarterly for discussions and deliberations. A working draft of the EMS System Plan is developed and with additional input, such as the results of this assessment, a more detailed document will be crafted in August, 2005. While progress to this point has necessitated the group to meet at large, further progress on implementing the plan and its goals will be achieved by smaller 'work teams'. Key to this process will be the inclusion of more broad representation and input from the entire EMS community. Enhanced use of electronic means of conducting meetings and communications will enable subcommittees for each of the EMS system components to plan and implement goals and objectives.

The Section will continue every effort to assure that the plan is a consensus-developed, strategic planning process and that it represents a partnership between the Section and the EMS community. This document will then provide the State and other policy makers with a basis for making informed decisions about ongoing development of EMS system. The structure of the EMS System Task Force needs to be monitored and amended, as needed, to best meet the needs of the EMS system. There also needs to be an effort to provide a mechanism for public input concerning EMS system design and performance.

**Six EMS regions have been contemplated in the EMS System plan (Appendix M).** This structure meets several needs:

- Each region is small enough to enable services and providers to meet and plan without excessive travel commitments.
- The challenges of EMS across the state varies widely and smaller regions helps to assure that unique regional needs can be discussed.
- The smaller EMS regions can easily be combined to align with the larger trauma regions for coordination with trauma system efforts.
- The EMS regions closely align with the MHA regions to enable concurrent planning with medical facilities.

Two representative members from each region participate on the EMS System Task Force, but further regional activity has not been implemented yet. Support for regions can improve networking capabilities allowing them to act as a liaison between state and local efforts.

With funding, these regions could serve as authorized extensions of the State in performing technical assistance and training, delegated state functions and implementing state policy and programs at the regional and local level. Especially with current limitations on staff, the opportunity to obtain ongoing face to face input in such a large state is virtually impossible. The only process currently in place is when the EMS service is inspected - once every two years.

**The Department needs to maintain existing funding sources and continue to seek alternative or dedicated funding sources**. The President's current budget 'zeros out' funding for the block grant and several other grants and would severely impact the Section's operational and program budget. While grants and other funds provides opportunities in focused projects, a dedicated source of funding for operational and ongoing EMS system development activities is needed.

**Current EMT practice is limited to the prehospital environment**. EMTs who wish to work in a hospital are hired as non-licensed, 'emergency techs' or some other such nomenclature that acknowledges their skills, but not their license. A bill was drafted for this legislative session to expand EMT practice into the emergency was tabled in committee. This initiative needs to be taken up again in the 2007 legislative session.

**Rural services have little purchasing power for insurance, vehicles, supplies and services**. The Critical Illness and Trauma Foundation in Bozeman is exploring options and grant funding to develop an EMS Network for such purposes. This network could be a valuable resource to many services and needs to be developed and implemented.

**The Section needs to evaluate the potential for obtaining an EMS Medical Director**. While the BOME is actively planning to approach the 2007 legislature for funding for a Medical Director, coordination with EMS&TS for service medical direction issues will be important. The State Trauma Care Committee is also exploring the need for medical direction for the Trauma System.

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| **Enact legislation which gives the EMS Bureau comprehensive authority to plan and guide the State`s EMS system under the policy direction of either a state EMS Advisory Council or Authority Board staffed by the Bureau. These alternatives allow for an Advisory Council which provides recommendations to the EMS Bureau, the state EMS director and medical director, or an EMS Board which would promulgate EMS policy and regulations and serve as an appeals body.** | | While an EMS Advisory Council was created within trauma system legislation passed by the 1995 legislature, that section of the law was later rescinded as part of a state-wide effort to reduce the number of advisory councils.<br><br>The EMS System Task Force was formed in April 2004. This task force was created informally, and although the State is again undergoing review and scrutiny of advisory groups, the Department is advocating continued support of the EMS System Task Force and the statutorily created Trauma Care Committee. |

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|---|---|---|
| Remove the service and vehicle licensure and personnel certification responsibilities from the Boards of Health and Medical Examiners and relocate those functions within the EMS Bureau. | completed | As discussed in the introduction of this section, the Department has, through a MOU, been administering the BOME's EMT licensing responsibilities. As of 2004, the roles are now again divided between the agencies.<br><br>BOME comment: This previous recommendation is not consistent with current national documents i.e., "National EMS Educational Agenda for the Future: A Systems Approach" which identifies a professional licensing system for Emergency Services Personnel (EMT's) |
| The state EMS law should define components of the system such as: training, evaluation, medical control, transportation, trauma care systems, communications, resource management, regulation and policy, facilities, and public information and education. | not completed | BOME comment: The board's statutes and rules define components such training, education, medical control (direction), regulations and policy for all levels of EMTs. |
| Implement a comprehensive data collection system with guaranteed confidentiality and immunity from discovery | ongoing<br><br>pending | A comprehensive, web-based data collection tool (OPHI) will be deployed in late 2005.<br><br>Confidentiality and immunity from discovery legislation will not be possible until the 2007 legislative session. |
| Require medical direction of all system components including the EMS Bureau. | BOME comment:<br><br>In place and functioning | BOME Note: The board has passed several motions supporting a statewide medical director and most recently has passed a motion to seek legislation in the 2007 session allowing the board to hire a state medical director under the board. Current rule requires a local medical director for skills preformed above the EMT basic level, the Board functions as the medical director for all skills performed at the basic life support level. |
| **Establish a dedicated state funding source, such as a $5.00 fee on vehicle registrations (the existing $1.00 fee for abandoned vehicle removal points the way).** | not completed | |

| | | |
|---|---|---|
| Rewrite administrative rules to ensure completeness, clarity, and brevity. The definitions section should be separate and should not define policy. | ongoing | Current EMS Service rule revision (due for adoption in August - attachment D) provides more clarity and brevity suggested by this assessment. This revision accommodates the new BOME endorsement levels of training and removes policy statements in definitions. Continue review of other sections will be necessary to provide clarity and to define further development of the EMS system.<br><br>BOME comment: The Board rules affecting EMT licensure, education and discipline were rewritten (and adopted January 2004) incorporating many of the issues and recommendations of the previous 1991 review, including but not limited to enhanced medical direction at all levels, educational program accreditation, adherence to National standard curriculum, utilization and requirement of the National Registry and definition and adoption of a standardized scope of practice. |

## Future Directions

EMS & Trauma Systems Section, as the state's EMS lead agency for EMS system planning and development will insure continued development of a comprehensive EMS system. Adequate funding will be sought to employ a network of regional or other technical assistance or program support resources to promote robust systems of recruitment and retention, data collection and use, training and education, medical oversight, quality improvement, and other components of strong EMS systems. Rural EMS providers will be explicitly represented in state-level EMS policy development. The state will participate in a NHTSA Technical Assistance Team reassessments every five years.

The roles of the Department and the BOME, will be coordinated and balanced to assure that both agencies work together to share resources and eliminate duplication.

## Objectives

✔ Survey EMS services, prehospital providers and others about EMS regulatory, organizational and funding challenges, needs and suggestions. Use the survey to provide input into the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |

| | | |
|---|---|---|
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Form an EMS Regulation and Funding subcommittee of the EMS System Task Force to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMSTS<br>BOME<br>EMS services<br>EMS providers |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Support the EMS System Task Force as an ongoing organization to provide input to the Department and BOME relative to strategic planning and EMS System Development. Periodically review the task force structure and membership.

| action steps | time frame | participants |
|---|---|---|
| | ongoing | EMSTS |

✔ Organize the EMS Regions and develop their role and a support system for them to plan and develop local, regional and statewide EMS systems.

| action steps | time frame | participants |
|---|---|---|
| As per the Regulation and Funding subcommittee | | |

✔ Explore EMS System funding strategies.

| action steps | time frame | participants |
|---|---|---|
| As per the Regulation and Funding subcommittee | | |

✔ Explore legislation which will help implement EMT practice and EMS System development.

| action steps | time frame | participants |
|---|---|---|
| As per the Regulation and Funding subcommittee | | |

✔ Explore the implementation of an EMS network for pooling of agencies for purchasing, insurance and other needs.

| action steps | time frame | participants |
|---|---|---|
| As per the Regulation and Funding subcommittee | | |

✔ Explore the strategies to obtain a State Medical Director.
BOME comment: The Board of Medical Examiners is continuing in its efforts to legislatively secure a state medical director position with the board. Medical direction is considering the practice of medicine and governed statutorily by the Board of Medical Examiners.

| action steps | time frame | participants |
|---|---|---|
| As per the Regulation and Funding subcommittee | | |

## B. RESOURCE MANAGEMENT

**Standard**

Central coordination and current knowledge (identification and categorization) of system resources is essential to maintain a coordinated response and appropriate resource utilization within an effective EMS system.

A comprehensive State EMS plan exists which is based on a statewide resource assessment and updated as necessary to guide EMS system activities.

A central statewide data collection (or management information) system is in place that can properly monitor the utilization of EMS resources; data is available for timely determination of the exact quantity, quality, distribution and utilization of resources.

The lead agency is adequately staffed to carry out central coordination activities and technical assistance. There is a program to support recruitment and retention of EMS personnel, including volunteers.

## Where We Are

**Numerous services report a shortage of EMS personnel to staff ambulances, especially during the normal 'working hours' of the day.** As in other rural states, Montana's EMS system is highly dependent upon volunteer personnel and many small communities have fewer and fewer people as a resource to draw from. Most of the state's volunteers work full-time in non-health related positions within the community and many employers are not supportive of employees taking time from work to be involved in emergency care.

**Most of Montana's EMS providers volunteer their personal time to provide prehospital care, but** a dwindling workforce is being challenged to maintain an EMS response 24 hours a day / 7 days a week. While these providers are more than willing to fulfill a crucial medical need in their community, there's minimal support to recruit new EMTs and to help retain current ones. A recent survey of the EMT licensing database revealed that of the EMTs that returned to recertify after their first two years, the majority only remained for about 10 years. As in other healthcare professions, the EMT workforce is aging (averaging in their mid-40's) and there doesn't appear to be a sufficient pool of new EMTs being trained to replace these aging EMTs as they begin requiring EMS services more than they are providing it.

**As the EMS System Task Force discusses issues and problems with Montana's EMS system, recruitment and retention has risen to the top of the list**. While the focus of this is typically about rural volunteers, the more urban and private services also report problems with recruitment and retention. Paid services are not always competitive with compensation provide by fire services, hospitals and EMS services in other states. Montana's paid services are at times viewed as 'training grounds' and stepping stones to jobs in other professions and other states.

## Progress on Meeting 1991 Recommendations:

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| **Improve citizen access, response efficiency and appropriateness considering, but not limited to the following:**<br><br>1) Complete a statewide E911 citizen access system. Carry out an addressing process, consistent with Automatic Location Identifier capability development, which includes mapping. | partially completed | 9-1-1 is completed and is discussed under the Communications component. ALI capabilities are largely in place and development has begun with wireless 9-1-1 and ALI needs. |
| 2) Evaluate the need for and feasibility of a roadway emergency call-box system. | Evaluated | Assessed internally - determined to be too expensive and unreliable. |
| 3) Establish Emergency Medical Dispatch training and system, with protocols to match the level of patient care required with an appropriate ground or air service, and to effect a timely dispatch. | not completed | Priority dispatch is utilized in some dispatch centers, but not universally around the state. |
| 4) Establish a system to define EMS service areas, both ground and air, to assure that there are no areas of underlap and to manage problems (e.g. caller confusion) in areas of overlap. | not completed | |
| Address personnel recruitment/retention issues, considering but not limited to the following:<br><br>1) Establish training programs in Critical Incident Stress Debriefing (CISD) and volunteer ambulance service management (e.g. New England EMS Council program), and structure a statewide CISD support system to aid in personnel retention. | partially completed | CISD is available.<br><br>No service management training has been implemented. |
| 2) Conduct Public Information and Education activities aimed at volunteer/career recruitment and retention (see PI&E section). | not completed | |

| | | |
|---|---|---|
| 3) Conduct surveys to determine what motivates Montana EMS volunteers to enter and exit the system and use the results for recruitment/retention planning. | not completed | BOME comment: The Board of Medical Examiners has addressed the major identified issues regarding retention of EMT's by: 1. Reducing the bureaucratic paperwork to re-license. They have established an on-line renewal system that allows the licensee to go on line and renew and print their new cards from their own printer. The system since implemented has been overwhelmingly successful with over 70% of the personnel utilizing the system the past two years.2. Removal of a system of pre-and post approval process for each refresher course taught at every level of EMT and replacing it with an audit QI system. Montana still exceeds the minimum requirements of the National Registry concerning refreshers by requiring the refresher be taught as program of instruction (not collected CE programs) and requiring a written and practical exam documenting successful completion.3. Allowing the local medical director to "tailor" their local EMS systems skills with the utilization of endorsements (enhanced skill sets) for their EMTs without requiring the EMT to obtain yet another level of licenusre. These endorsements are developed and approved by the Board of Medical Examiners and have specified curricula that follow the intent of the National EMS Practice Blueprint and the EMS Educational Agenda for the Future: A Systems Approach.4. Allowing a process for examinations (for all levels of licensure) that is consistent with National Registry requirements and that is locally administered; thus decreasing time to examination, turn around of results, travel time and individual cost and is consistent with future plans of the National Registry CAT development. |
| 4) Develop dedicated revenue sources to support state subsidization of training courses, local recruitment/retention projects, and equipment purchase grants, especially to assist volunteer services. | not completed | |
| 5) Evaluate the role of the low volume, volunteer ambulance services. Use of these volunteers as first responders with more regionalized ground and air transport services as indicated. | not completed | |

| | | |
|---|---|---|
| **Address certain EMS personnel capability issues, considering but not limited to the following:**<br><br>1) Encourage First Responder trained police officers to recertify. | not completed | While this was previously being accomplished, the law enforcement academy is now only providing basic first aid instruction to peace officers. |
| 2) A patient should be attended by a Basic EMT or higher en route to an emergency facility. | completed | One EMT is required on all transports. |
| 3) A state standardized nurse-to-EMT bridge course should be implemented to assure that all nurses who are considered as EMT or advanced EMT equivalents actually have those skills and knowledge commensurate with their level of certification. | completed<br><br>not completed | BOME comment: The Board of Medical Examiners has been meeting with the Montana Board of Nurses for the past 10 years discussing this issue. For an 8 year period, Registered Nurses who were also licensed as EMT-Basic could challenge the educational component for establishing a course completion and subsequent testing at the National Registry, but that provision has not been continued with the most recent rule revision. That provision was established to allow nurses functioning on flight teams who wanted a parallel licensure a method to accomplish dual licensure. The need or use of that provision is no longer necessary or wanted in the system. The Board of Nursing has been requested (numerous times) to identify the definition of a nurse who would be consistent with the skills and knowledge of the EMT (any level) and they have been unable to do so. |
| 4) Statewide, standardized requirements for air-medical personnel at all levels should be implemented. | | The industry self-regulates training and requirements, but there is no state standard. |
| 5) Implement statewide, standardized training for ground EMS personnel which acquaints them with air-medical launch criteria and interface/patient transfer procedures (e.g. safety measures). | completed | Implemented by all rotor wing services, but not standardized. |

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|---|---|---|
| 6) Conduct a retrospective study to determine the need for alternative ALS licensing levels, or changes in the scope of practice for existing levels. Stay with existing national standard levels unless scientifically convincing evidence to the contrary results. | completed | BOME comment: The Board of Medical Examiners adopted a licensure system that contains the best of all worlds. It allows Montana to maintain a national system of training and licensure while still allowing the local medical director to tailor their local systems to the needs of the community. The state has established the four nationally recognized levels of EMT (First Responder, Basic, Intermediate/99 and Paramedic) and established professional licensure for each. In addition, the Board has established standardized specialties that each level of licensure can obtain. The specialties are specific to the level of licensure, have a curriculum developed, and are required to be overseen by the medical director. There is course completion documentation and record keeping processes to assure that individual who have completed endorsements are identified (and are placed on the state wide licensee look up system). The medical director of a specific service has the ability to allow or deny the individual from utilizing the specialty. The development and construction of the endorsement system is consistent with the National Education and Practice Blueprint and follows the direction the National Scope of Practice (a sub part of the EMS Educational Agenda of the Future: A Systems Approach ) development. The endorsement process can be modified and a process for modification (addition or deletion) is identified in the rules. The Board feels that this is system of licensure that allows national adherence to nationally recognized levels for reciprocity and legal recognition but still allows local (and state) flexibility. |
| 7) Prohibit certified EMS personnel from routinely providing care for patients on aircraft not licensed by Montana EMS as air ambulances. | | While FBO's who only provide transport are still provided an exception to service licensing in Montana statute, Medicare, Medicaid and IHS do not reimburse such service and the incident of non-licensed transports is minimal. |
| 8) Standardize Mass Casualty Incident and Haz Mat management plan and training for EMS personnel. Define the role and interactions of all agencies involved in such responses. | not completed | |

| | | |
|---|---|---|
| Develop and manage a comprehensive EMS communications system plan including, but not limited to the following:<br>1) Uniform, statewide EMS vehicle numbering/ identifier system; and | not completed | |
| 2) Dedicated air/ground medical frequencies not used for ground/ground purposes. | not completed | |
| Through symposia or other methods, the EMS Bureau should assist providers in establishing a reasonable schedule of fees and systems of billing which address at least the following issues:<br>1) Charges which are tied to actual costs; and<br>2) Millage utilization. | not completed | |
| Hospital Resources<br>Categorize/designate facilities as to their patient care capabilities. This information should be reflected in prehospital and inter-facility triage and transport protocols which are disseminated to all affected personnel. | pending | |
| Develop hospital mechanisms for patient-outcome feedback to prehospital services | not completed | |
| System Resources<br>In conjunction with the recommendations made in the "Regulation and Policy" section, create a single state EMS structure in which all EMS system planning, rule-making, policy-setting, and coordinating responsibilities are incorporated. | | BOME comment: While a single state agency is possible and could be accomplished, current documents and activities within EMS across the county is clearly identifying that for EMS to truly have the respect and professionalism we want, the individuals will have to be professionally licensed. The movement of EMT licensure to professional licensing boards must occur if EMS is to have the professional standing we envision. Efforts must be coordinated to achieve this with in a state system. |
| Whether planning responsibilities are given to an authority board (which the Bureau staffs) or to the Bureau (advised by a state EMS council), the authority board or advisory committee should have a subcommittee structure to address functional sub-components of the EMS system (e.g. air-medical, trauma, education) which has geographic and multi-disciplinary representation. The authority board or advisory council should, itself, be similarly representative. | | Committee structure is planned to begin soon. |
| Establish local or regional EMS planning bodies (e.g. councils). Empower these bodies to coordinate the local or regional EMS system and to channel input to and review work of the centralized EMS authority/system planning agency which is adopted. | pending | While a state EMS System Task Force has been formed, defined regions are not yet active. |

| | | |
|---|---|---|
| Consider ASTM standard F1086-87 on structures and responsibilities for local, regional, and state EMS organizations in creating the structures reflected in the above recommendations. | not completed | |
| Fund and implement statewide EMS data and QA/QI systems. | pending | The Online PreHospital Information system will be deployed by this fall. This will lead into quality improvement activities in the near future. |
| Revise, complete and disseminate the existing state EMS plan. | pending | The task force will meet in August to review the assessment recommendations and to finalize the EMS plan. |

## Future Directions - Human Resources

"Surveys of state EMS directors have consistently shown recruitment and retention of personnel to be the greatest barrier to the successful provision of rural/frontier EMS".

-Kevin K. McGinnis, MPS, WEMT-P. Program Advisor, Crew Chief, Winthrop Ambulance Service, Maine
Rural & Frontier EMS Agenda for the Future

Develop and implement a community EMS assessment process which encourages the community to consider the contribution of EMS volunteers in the type and level of care that it selects and subsidizes. Assure volunteers have adequate incentives and compensation to volunteer. Develop strategies for paid staff to be adequately compensated to earn a comfortable living in their community. Promote evidence-based implementation of a local EMS system including tiered response and ALS when appropriate.

Provide programs to assist EMS services in educating communities about recruitment and retention challenges. Include strategies to support business who employ EMTs and allow them to provide a response during business hours.

Motivate and retain EMS personnel through a mix of incentives (such as professional liability, retirement and tax benefits), public education, excellent training resources and appropriate awards or recognition for dedicated providers.

Evaluate the skills and knowledge of other health care providers and develop "bridge to EMT" courses to enhance basic and advanced life support capacities.

## Objectives

✔ Survey EMS services, prehospital providers (current and expired) and others about EMS recruitment and retention challenges, needs and suggestions. Use the survey to provide input to the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |

| | | |
|---|---|---|
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Form an EMS Resources subcommittee of the EMS System Task Force to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMSTS<br>BOME<br>EMS services<br>EMS providers |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Develop an advertising and educational campaign to raise public awareness of the recruitment and retention challenges faced by emergency medical services.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Evaluate strategies to **recruit** new EMTs (volunteer and paid) to EMS services.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Evaluate strategies to **retain** EMTs (volunteer and paid) on local services.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Evaluate how other licensed providers may be used as part of a prehospital workforce.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Conduct regular statewide needs assessments to identify numbers of providers and types of care provided and develop appropriate strategies to address workforce issues.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

## C. HUMAN RESOURCES / EMS EDUCATION

**Standard**

EMS personnel can perform their mission only if adequately trained and available in sufficient numbers throughout the State. The State EMS lead agency has a mechanism to assess current manpower needs and establish a comprehensive plan for stable and consistent EMS training programs with effective local and regional support.

At a minimum, all transporting out-of-hospital emergency medical care personnel are trained to the EMT-Basic level, and pre-hospital training programs utilize a standardized curriculum for each level of EMT personnel (including EMS dispatchers).

EMS training programs and instructors are routinely monitored, instructors meet certain requirements, the curriculum is standardized throughout the State, and valid and reliable testing procedures are utilized.

In addition, the State lead agency has standardized, consistent policies and procedures for licensure (and re-licensure) of personnel, including standards for basic and advanced level providers, as well as instructor certification.

The lead agency ensures that EMS personnel have access to specialty courses such as ACLS, PALS, BTLS, PHTLS, ATLS, etc., and a system of critical incident stress management has been implemented.

## Where We Are

The Montana Board of Medical Examiners has the statutory responsibility for the licensing of pre-hospital personnel (EMTs at all levels). They regulate the training, education, and discipline the EMTs. The Board also establishes and regulates the Lead Instructors (course and program mangers) and medical directors. Constant National Registration is one of the requirements of the licensure process, as is National Practitioner Data Base searches, age, educational standards and verifications of other licenses.

National Registry exams are coordinated through the Board and are conducted within National Registry guidelines locally across the state.

The Board of Medical Examiners adopted a licensure system that contains the best of all worlds. It allows Montana to maintain a national system of training and licensure while still allowing the local medical director to tailor their local systems to the needs of the community. The state has established the four nationally recognized levels of EMT (First Responder, Basic, Intermediate/99 and Paramedic) and established professional licensure for each. In addition, the Board has established standardized specialties that each level of licensure can obtain. The specialties are specific to the level of licensure, have a curriculum developed, and are required to be overseen by the medical director. There is course completion documentation and record keeping processes to assure that individuals who have completed endorsements are identified (and are placed on the state wide licensee look up system). The medical director of a specific service has the ability to allow or deny the individual from utilizing

the specialty. The development and construction of the endorsement system is consistent with the National Education and Practice Blueprint and follows the direction the National Scope of Practice (a sub part of the EMS Educational Agenda of the Future: A Systems Approach ) development. The endorsement process can be modified and a process for modification (addition or deletion) is identified in the rules. The Board feels that this is a system of licensure that allows national adherence to nationally recognized levels for reciprocity and legal recognition but still allows local (and state) flexibility. The actual levels and allowable endorsements are described below:

**EMT-First Responder**

Utilizes and requires the Department of Transportation (DOT) 44-hour First Responder curriculum. This program is utilized by Quick Response Units, law enforcement and fire agencies and it is the minimum personnel requirement for agencies licensed by the Department as Non-Transporting Units.

Endorsements allowed at the EMT-First Responder licensure level include:

**Immobilization Endorsement** - provides the EMT-First Responder the skills to immobilize a patient (splinting and back-boarding) prior to the arrival of the ambulance. Many agencies utilizing EMT-First Responders are part of a tiered response and provide the initial care prior to the arrival of the ambulance and the immobilization skills could be a great asset to the EMS system and patient care.

**FR-Monitoring Endorsement** - allows the EMT-First Responder to utilize a pulse oximeter and glucometer for the purposes of obtaining, recording and reporting the findings. Many EMS systems would like the EMT-First Responder to be able to utilize a pulse oximeter and a glucometer to enhance early assessment findings.

**Ambulance Endorsement** - prepares the EMT-First Responder to operate on an ambulance as a care attendant. It provides the EMT-F the minimum knowledge and skill base to function with common equipment found on transporting ambulances. The State of Montana requires an EMT-F with the ambulance endorsement as the minimum staffing requirement for a transporting ambulance. This endorsement includes the Immobilization endorsement as well.

**EMT-Basic**

Utilizes and requires the national standard EMT-Basic course curricula. This level of training is the basis for ambulance personnel across the nation and was developed for that purpose. EMS service licensing rules require at least one EMT-Basic on all BLS service runs.

Endorsements allowed at the EMT-Basic licensure level include:

**Airway Endorsement** - allows the EMT-B to utilize a double lumen airway for airway management. It includes an overview of manual and mechanical airways (oral and nasal) as well as ventilation and oxygen administration. The endorsement allows and reviews the PTL airway and the Combi-Tube.

**IV/IO Maintenance Endorsement** - allows the EMT-Basic to monitor a previously established peripheral IV or IO cannulation and clear fluid. This endorsement has been developed to a meet an identified need to transport patients between medical facilities that have been managed by a physician previously. It is not intended for starting peripheral lines out-of-hospital.

IV/IO Initiation Endorsement - allows the EMT-Basic to initiate and manage peripheral IV and IO cannulation and infuse clear fluids (NS, D5W, D10W LR). This endorsement includes the IV/IO Maintenance Endorsement.

**EMTB Monitoring Endorsement** - allows the EMT-Basic to utilize a pulse oximeter and a glucometer for the purposes of obtaining, recording, reporting, interpreting and utilizing the readings to modify patient care. This endorsement enhances the EMT-Basic's ability to accurately assess and manage the out-of-hospital patient.

**Intubation Endorsement** - allows the EMT-Basic to manage the airway of an unconscious, unresponsive, and pulseless patient with an endotracheal tube. The patient's age must be in excess of 12 years of age. The endorsement allows direct visualized intubation of the adult.

**Medication Endorsement** - allows the EMT-Basic to carry and utilize the medications that previously EMT-Basic's were allowed to assist the patient with, provided that the medications are prescribed to that specific patient. The medications included in the endorsement are: EPI (for anaphylactic reactions), nitro (for chest pain), bronchodilators-beta agonist (for difficultly breathing) and glucagon (for diabetic emergencies). The endorsement allows the service to carry and administer the medications as necessary based on the presenting patients condition.

## EMT- Intermediate/99

Utilizes and requires the national standard EMT-Intermediate/99 course.

Endorsements allowed at the EMT-Intermediate licensure level include:

**Needle Decompression of the Chest and Surgical Airway Endorsement** - allows the EMT-I/99 to perform the skill of needle chest decompression and performing an out-of-hospital surgical airway.

**Immunizations Endorsement** - allows the EMT-I/99 to administer standard immunization medications such as flu vaccine and to assist with the home health and public health duties in the local area.

**Drips and Pumps Endorsement** - allows the EMT-I/99 to initiate and maintain drip medications and utilize pumps to manage the flow rates. The 12 Lead Transmission Endorsement allows the EMT-I/99 to obtain and transmit a 12 lead ECG to the Emergency Room or on-line medical control.

## EMT- Paramedic

Utilizes and requires the national standard EMT-Paramedic curricula.

Endorsements allowed at the EMT-Paramedic licensure level include:

**12 Lead Interpretation Endorsement** - allows the EMT-Paramedic to obtain and interpret a 12 lead ECG for the purposes of increasing the assessment information and treatment options.

**Medications Endorsement** - allows the EMT-Paramedic to administer additional medications that are beyond the standard emergency medications the EMT-P would utilize in the out-of-hospital environment. This endorsement is utilized by the out-of-hospital EMT-Paramedic who intermittently transports patients between medical facilities (typically local medical facilities to regional trauma centers) who have been administered medications outside the standard emergency medications normally carried and administered by the EMT-Paramedic.

**Fibrinolytic and 12 Lead Interpretation Endorsement** - allows the EMT-Paramedic to obtain and interpret a 12 lead ECG for the purposes of increasing assessment information and treatment options including the administration of fibrinolyics in the out-of-hospital setting. This endorsement includes the 12 Lead Interpretation endorsements.

**Critical Care Transport Endorsement** - prepares the EMT-Paramedic to manage critically injured or critically managed (ICU / CCU) patients during transports between medical facilities. The curricula are parallel to other programs offered in other parts of the county.

**The various 'alphabet courses' PEPP, PHTLS, PALS are conducted across the state,** but as there is not any state-wide tracking mechanism for these courses, it's unknown how many EMTs have taken these. The Section has sponsored PEPP and PHTLS instructor courses and GEMS and TBI courses.

**Most of Montana's EMS education is provided locally, by volunteers, in remote, rural systems with few resources and little support**. While Montana had six funded EMS regions going into the 1982 Omnibus Budget Reconciliation Act, only one around Great Falls still exists - and it is supported primarily by volunteer effort. With the demise of regions, regionalization of planning, education and resources also went away. Several vendors provide local EMS education, but many communities do not have the financial resources to utilize them. Most education is 'financed' by the individual EMT and long distances to training and travel costs are a burden.

**Local EMT courses have numerous challenges**. Many courses draw students from an ever limiting pool of volunteers. Communities invest a vast amount of time and energy to add only a few new EMTs to their rosters. There are few examples of centralized instruction or regionalization of resources. Any such cooperative efforts usually adds travel time and expenses to the student's training commitments as they travel to central sites for training.

A collaborative effort of the Critical Illness and Trauma Foundation, Montana State University and the EMS & Trauma Systems Section, **a TenKids electronic bulletin board was implemented to improve communication between EMS professionals** throughout Montana. Continued support and participation of the bulletin board waned and the aging software and server were recently discontinued. The Task Force needs to re-evaluate the program and determine if it is worth reviving under the Department's learning management system which is being implemented.

**The STARS mobile education program** from Calgary Alberta makes occasional and hugely popular swings into Montana. A motorhome constructed with a large mobile emergency room containing the highly sophisticated HPS mannequin, it brings training to communities who are unable to travel to such training at distant locations. An educational consortium in eastern Montana has recently obtained one of the HPS mannequins and is implementing a "STARS light" version of this education (no motorhome - no mobile ER). Very popular so far, Montana needs to assess how to support this and other such mobile training opportunities.

**In many communities, the law enforcement officer is the first person on the scene** of a injury or illness. An most areas, they are an critical member of otherwise limited EMS response. Until recently, all law enforcement officers attending the Montana Law Enforcement Academy basic course were required to complete a First Responder training program. For a

myriad of reasons including time constraints of the entire basic program, costs and a low relicensure rate for officers in many departments, the academy now only offers basic first aid education.

As it has since 1979, the Office of Public Instruction conducts an **advanced driver training program**. Built upon WWII bomber training runways near the current airport, the one-day program provides basic driving education and teaches skills such as cornering, braking and skid control. The program utilizes vehicles ranging from passenger cars, school buses and ambulances.

The Board requires **all EMTs who coordinate initial EMT training courses to attend a Lead Instructor program.** While this program primarily focuses on the administrative and regulatory aspects of training, it also provides limited instructor education. No other instructor programs are universally propagated across the state. The BOME is planning to conduct an Instructor Conference in fall 2005.

**Several interactive compressed digital video and telemedicine systems are in use across the state**. In order to lesson travel, both the Eastern and Central Regional Trauma Committees have used telemed systems extensively for their meetings and education. While these systems are used heavily by other users for education, meetings and interactive needs, utilization by EMS has been light.

**A recent popular development for use of these systems has been sponsored through Northwest Telehealth in Spokane WA.** In collaboration with Spokane County EMS and the Spokane County Medical Director, EMS Live @ Nite! conducts interactive video conferencing broadcasts to rural communities including Montana. This program provides education the 2nd Tuesday of every month to emergency medical service personnel in emergency response, injury prevention, safety awareness and other topics relevant to the delivery of emergency medical services.

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| **Develop a comprehensive and standardized certification program for instructors which should include the tenets of adult education and methods of instruction. The program should ideally include the U.S. DOT EMS Instructor Training Program.** | ongoing | BOME comment: The current Lead Instructor training program (which is required of all program and course coordinators) consists of 10 hours of instructor development material constant with the current Instructor Guidelines (2004) produced by NHTSA. The subsequent training of Lead Instructors will include additional sections of the Instructor Guidelines. In addition the Board will be hosting an Instructor Conference in the fall or 2005 in which they will present programs on didactic, practical and clinical instructional techniques and theory, consistent with the DOT/NHTSA guidelines. Since January 2004, Lead Instructors have been updated and trained with the new instructor guidelines. |

| | | |
|---|---|---|
| **Review the plan for evaluating knowledge and psychomotor skills as a prerequisite to recertification. The evaluation should be performed using standardized and valid testing instruments.** | completed | BOME comment: National Registration is a perquisite for licensure, initially and for re-licensure. The National Registry written and practical exams utilize standardized and valid testing instruments. |
| Encourage and financially support the upgrading of grandfathered Advanced First Aid and First Responder personnel to the EMT-Basic level. | | Very few grandfathered AFA personnel remain on ambulance rosters, but no plan to phase them out has been implemented. |
| Develop and implement a quality assurance program for EMS Instructors. The program should include instructor monitoring during training programs. | | BOME comment: The Board has established an audit system to assure compliance with training requirements. In addition they have developed a "program" approval process which parallels educational program accreditation to allow the secondary educational facilities and others to demonstrate quality control methods that are comparable with other educational structures. This system is constant with the EMS Educational Agenda for the Future: A Systems Approach and is intended to prepare our training programs for that transition. |
| Training programs should address state, regional, and local peculiarities, such as increasing frequencies of geriatric emergencies, wilderness emergencies, triage and transfer protocols. | | BOME comment: All programs are required to utilize national standard curricula which have been enhanced to include the various geriatric and pediatric needs. Local programs are encouraged to include third party programs such as PALS, PEPP etc. |
| The Montana Emergency Nursing Education course should be updated and reimplemented to increase emergency nursing skills throughout the State. | not completed | This course no longer exists. It has been substantially replaced by the Trauma Education for Nurse (TERN) course and other programs. |
| Consider using existing statewide educational resources, such as high schools, community colleges, and universities etc., to ensure that EMS training programs are accessible as possible. | | BOME comment: Many of the universities have incorporated EMS educational programs into the curricula. This has been encouraged by the option of the "program "approval by the board. Additionally, there are 4 EMT programs that have been established in the primary educational system (high school) as a part of the health and PE program. |
| The State of Montana should subsidize, in whole, or in part, the education of volunteer emergency medical personnel. | not completed | |
| Amend the administrative rules regarding reciprocity to allow individuals certified by the National Registry of EMTs to participate in advanced training programs within Montana. | completed | BOME comment: The licensure process requires National Registry as a requirement of licensure. |

| | | |
|---|---|---|
| Continue to work with the Indian Health Service to promote high quality EMS training and patient care. | | BOME comment: All of the reservations utilize the current system of education and training. Dr. Upchurch (a Board member) conducts medical director education to physicians operating in the Indian Health Service System and acts as a consultant across the state for EMT training programs in the Indian Health System. |
| Increase the availability of Critical Incident Stress Debriefing training and retraining. | completed | A system of Critical Incident Stress teams is managed through the Disaster and Emergency Services office. |
| Increase the availability of EMS management and leadership training. | not completed | |
| Develop a clearly understood mechanism for determining whether nurses have completed the behavioral Objectives contained in the U.S. DOT EMT-Basic curriculum. | not completed | BOME comment: The Board of Medical Examiners has been meeting with the Montana Board of Nurses for the past 10 years discussing this issue. For an 8 year period, Registered Nurses who were also licensed as EMT-Basic could challenge the educational component for establishing a course completion and subsequent testing at the National Registry, but that provision has not been continued with the most recent rule revision. That provision was established to allow nurses functioning on flight teams who wanted a parallel licensure a method to accomplish dual licensure. The need or use of that provision is no longer necessary or wanted in the system. The Board of Nursing has been requested (numerous times) to identify the definition of a nurse who would be consistent with the skills and knowledge of the EMT (any level) and they have been unable to do so. |
| Ensure that examination and educational processes adhere to adopted educational standards. | | BOME comment: As stated before, the National Registry is required for licensure and the process is overseen by the Board. |

## Future Directions

"The way we prepare EMS personnel of the future will be much different than it is today. Training curricula will evolve based on real data pertaining to the type and frequency of prehospital encounters. Emerging distance learning technologies need to be embraced as they become the best practice standards of achieving performance change. EMS education and training of the future should be competency based, that is oriented toward the attainment of knowledge, skills and performance competencies necessary to care for the sick and injured patient, rather than on requisite numbers of classroom hours. Each adult learner brings a differing amount of previous knowledge and experience to the training environment, the

education and training system needs to recognize and build upon those competencies. Additional emphasis will be placed on the preparation of quality EMS educators/instructors, accreditation of training programs, and the attainment of national standards while retaining local flexibility. Structured performance improvement processes should guide both group and individual continuing education."

-Nels D. Sanddal, MS, REMT-B, Director, Rural EMS and Trauma Technical Assistance Center
Rural & Frontier EMS Agenda for the Future

As part of a local assessment process, assist an EMS system to determine the type and level of care it wishes to maintain and subsidize. Provide adequate training and education resources to support statewide and local education needs. Develop EMS educational programs which can be made available through local instructors and distance learning resources.

Develop and implement a Montana model for providing basic and advanced EMS training and continuing education which uses a mix of distance learning, decentralized practical skills learning and clinical learning appropriate to the level of training. Develop methods of providing education to the volunteer, non-traditional student which accommodates accessibility to rural/frontier providers. Assure an infrastructure which supports and subsidizes courses and continuing education programs with trained instructors, equipment supply and technical assistance.

Develop and implement a instructor development education which includes education, technical assistance and incentives to support an instructor 'certification' process.

## Objectives

✔ Survey EMS instructors, services, prehospital providers and medical directors about EMS education challenges, needs and suggestions. Use the survey to provide input into the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Form an EMS Education subcommittee of the EMS System Task Force to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMSTS<br>BOME<br>ems instructors<br>medical directors |

| | | |
|---|---|---|
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Develop a program to subsidize initial and ongoing EMS education.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Education subcommittee | | |

✔ Develop and implement an instructor development program. Provide incentives for instructors to receive training and obtain instructor 'certification'.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Education subcommittee | | |

BOME comment: The current Lead Instructor training program (which is required of all program and course coordinators) consists of 10 hours of instructor development material constant with the current Instructor Guidelines (2004) produced by NHTSA. The subsequent training of Lead Instructors will include additional sections of the Instructor Guidelines. In addition the Board will be hosting a Instructor Conference in the fall or 2005 in which they will present programs on didactic, practical and clinical instructional techniques and theory, consistent with the DOT/NHTSA guidelines. Since January 2004, Lead Instructors have been updated and trained with the new instructor guidelines.

✔ Develop strategies, such as telemed and other interactive video sysetms, web-based internet, CD-ROM, bulletin board and any other technology which will help provide education to local communities.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Education subcommittee | | |

✔ Develop a strategy to optimize utilization of the Department's learning management system for EMS education.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Education subcommittee | | |

✔ Develop a strategy to provide training aids and other support materials to local education programs.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Education subcommittee | | |

✔ Evaluate a strategy of using a 'traveling van' program to provide EMS education to local areas.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Education subcommittee | | |

✔ Evaluate the need for First Responder or other education for pubic service such as fire and law enforcement. Develop a strategy to provide education to such agencies.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Education subcommittee | | |

✔ Develop and implement Emergency Vehicle Operator education.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Education subcommittee | | |

## D. TRANSPORTATION - EMS SERVICES AND MEDICAL RESPONSE TO DISASTERS

**Standard**

Safe, reliable ambulance transportation is a critical component of an effective EMS system. The transportation component of the State EMS plan includes provisions for uniform coverage, including a protocol for air medical dispatch and a mutual aid plan. This plan is based on a current, formal needs assessment of transportation resources, including the placement and deployment of all out-of-hospital emergency medical care transport services.

There is an identified ambulance placement or response unit strategy, based on patient need and optimal response times.

The lead agency has a mechanism for routine evaluation of transport services and the need for modifications, upgrades or improvements based on changes in the environment (i.e., population density).

Statewide, uniform standards exist for inspection and licensure of all modes of transport (ground, and air) as well as minimum care levels for all transport services (minimum staffing and credentialing). All out-of-hospital emergency medical care transport services are subject to routine, standardized inspections, as well as "spot checks" to maintain a constant state of readiness throughout the State.

There is a program for the training and certification of emergency vehicle operators.

## Where We Are - EMS Services

**Emergency medical services (EMS) are provided to Montanans by licensed EMS provider services located throughout the state**.

Non-transporting units are groups of providers, EMT-First Responder minimum, who respond to scenes to initiate patient care until an ambulance arrives. Most of the units are either EMS or fire-based units. Advanced life support on NTUs is typically provided on a less-than 24/7 basis - typically due to limited staff with this advanced training.

Ambulance services are staffed by a minimum of two EMTs - only one is required to be an EMT-Basic. The other attendant can be a “First Responder - Ambulance” or a First Responder with an ambulance endorsement which provides education about moving patients and other ambulance operations to the First Responder. These services operate under a broad umbrella of volunteer to paid, hospital and fire-based to independent services.

Rotor wing services are based with hospitals in Billings, Great Falls, Kalispell and Missoula. he second hospital in Missoula is planning for a second helicopter in that area.

All but one private fixed wing service are hospital based.

The 16 full-time paid transporting services are private (10), fire-based (5) and hospital based (1). All the remaining services represent a broad spectrum of totally volunteer to being paid small stipends to pay for on-call and duty time. How services bill is also a broad scattering of private services to 'volunteer' services who bill to some that still do not charge for anything for services.

**Services are licensed through the Department for two year periods.** Current minimum requirements for service licensure include documentation of the service's vehicles (with basic equipment on each vehicle), radios (with minimum channel configuration), licensed EMTs or other authorized personnel (such as nurses with medical director sign-off) and various requirements for record keeping, sanitation and maintenance (Appendix B).

Services are inspected once during the two-year period - mostly to verify vehicle and roster information and to spot check if minimum documentation on patient care records is occurring.

**Proposed rule changes are currently being filed** - the first revision since 1990 (Appendix D). While not a comprehensive change in rules, these primarily reflect numerous changes to accommodate the new endorsement levels of training that the BOME adopted last year.

Two other changes are significant steps towards rules which can foster development of licensing EMS systems instead of just EMS services.

Under these proposed rules, only services which can reasonably provided advanced life support 24/7 will be licensed at an ALS level. Services with limited resources to provide ALS 24/7 will be licensed at a basic level - but with an authorization to provide ALS. This paves the way to help make it easier for communities to understand what sort of EMS system they have. Additionally, we can begin to develop strategies to regulate 'part-time' services differently than full-time.

Additionally, any service that provides a level or an endorsement above the basic life support level will be licensed or authorized to provide advanced life support. There will be no distinction between intermediate and paramedic and the various levels of endorsement. This begins to pave the way to develop strategies to license systems. Several communities now have multiple licenses (BLS and ALS - NTU and transporting). Such a regulatory process does not promote the development of tiered systems of patient care.

The task force will be considering future regulatory changes to promote quality improvement and the development of EMS Systems.

**The Critical Illness and Trauma Foundation conducted several EMS community assessments in 2002.** This project was designed to help EMS providers and communities to collaboratively take an active role in determining the types of EMS service that best suits their community's needs. A Community Planning Guide was used as a tool to help EMS agencies conduct internal and external assessments and to evaluate their strengths and weaknesses and to provide a clear understanding of the needs of their customers and how to meet these needs. Each area received a report which shows problems and solutions. A followup to these visits has not been conducted to assess their effectiveness.

## Where We Are - Medical Response to Disasters

**There is not a planned, statewide system for medical response to disasters** which clearly defines who responds, where and under what conditions. While licensing standards for EMS services helps to assure standardized levels of staff and equipment, there is no uniform policies or training to assure a standardized and appropriate mutual aid response to disasters.

EMS data is critical from a resource utilization perspective. The ability to know what resources are available in a timely manner with respect to equipment, personnel, and expertise is essential. Real-time EMS data must be collected at the local level and provided to the state to integrate with mutual disaster responses. Currently, the state's resource management system is an archaic, paper-based system which would be difficult to utilize in a disaster.

**The Montana Health Information and Resource Management System - Montana HIRMS (Appendix N) seeks to develop an integrated, functional and economical information system** for patient records, quality improvement, resource information and incident management. Funded largely with HRSA hospital bioterrorism grant funds, the security and user management backbone and a new patient care record system are due for testing beginning in June and July. Development of advanced registry modules and resource database functions are in development or planning phases.

**Numerous incident management, incident command and weapons of mass destruction awareness courses have been conducted in the state.** Many EMS providers have participated in these training opportunities, however there is no documentation system to easily identify who has taken the training and how long ago they may have been trained. The Department is procuring a learning management system and plans are being made to utilize it to help conduct and document such training.

**While other states report that EMS has been minimally funded with homeland security grants, Montana EMS has done reasonably well**. Local EMS services were slow to come to the table to request funding from emergency planning councils, but many have been successful with request for equipment, communications and supplies in the last year. At the State level, Department grant funds from CDC funded $250,000 in Project 25 radio upgrades for ambulances and hospitals in northeastern Montana. Yet to be deployed, seven trailers are configured with backboards and other disaster response supplies for 100 patients.

HRSA grant funds have been utilized for numerous projects. Another $250,000 is funding continued P-25 upgrades. In addition to each ambulance service receiving 10-person disaster kits which compliment the trailers, services have received WMD resource manuals and PPE. These HRSA grant funds have funded development of the patient care record, advanced credentialing and resource database modules of **Montana HIRMS**.

A three-year homeland security grant to St. Vincent Hospital in Billings has actively provided significant training opportunities to EMS, fire, hospitals and others in areas such as WMD, incident command, pediatric disaster education and HIECS.

Unlike other states, the EMS & Trauma Systems Section has not been overwhelmed and consumed by homeland security responsibilities. While this has enabled us continue to focus

on our strategic planning and technical assistance goals, there have been numerous missed opportunities and delays to preparing EMS for disaster response.

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| Develop and implement a statewide system for inter-facility transports. | not completed | |
| Develop and implement a formal procedure for investigating and resolving complaints regarding ground and air-medical services, as well as EMS personnel. | not completed | There's an internal administrative process, but it has not been well defined. |
| Fixed base operators, who plan to or do routinely transport emergency medical patients, should become licensed as an air-medical service at the appropriate level. | not completed | |
| Inspect all ambulances with overdue inspections and adopt an inspection schedule. | completed | |
| Assign unique radio designator to ground ambulances to avoid possible confusion. | not completed | |
| **Develop and implement a plan for contract purchasing of ambulances to ensure that vehicles are replaced in a timely manner with ones meeting state licensing standards.** | not completed | |
| Provide training opportunities to ensure that medical assistance facilities are capable of providing the scope of service which equals or exceeds the scope for an advanced level prehospital care system. | ongoing | |
| Develop or encourage the development of criteria for dispatch and cancellation of air-medical units and compare utilization with the criteria to determine whether air-medical use is appropriate. | not completed | |
| Assist interested emergency medical services with identifying, evaluating, and implementing billing systems. | not completed | |
| Increase the availability of ambulance vehicle operations courses (AVOC). | not completed | |
| Ensure that incident command system training is provided to all levels of EMS ground and air-medical personnel. | not completed | |
| Training in landing zone safety should be available to all emergency medical services within the operational zone of an air-medical service utilizing rotor wing aircraft. | completed | |

| | | |
|---|---|---|
| Develop a dedicated funding mechanism to establish a matching grant program for capital equipment, such as vehicles. | not completed | |

## Future Directions - EMS Services

There is a process in place to allow communities to make informed decisions about the type and level of EMS response they desire. Every community has the opportunity to have a community based assessment by an objective technical assistance team visit whose members come from outside that community. This assessment provides baseline information for the EMS service and community leaders to determine the type and level of EMS that it desires and the means with which it is funded.

Develop a regulatory system that fosters the continuous improvement of emergency medical services. Create a system which allows for local variations in emergency service needs and creative methods to EMS systems. Develop standards for EMS systems that will focus more on patient outcomes and appropriate access to care rather than levels of equipment and personnel.

Each local EMS agency uses quality assurance / quality improvement and evaluation processes to plan and implement their local EMS system. A technical assistance team process, using expert teams who come to a community and evaluate the local EMS system, will be implemented.

Service managers are provided a training program which includes outcomes measurement and performance improvement, EMS leadership, public and elected official advocacy, public education, grant-writing, data collection, research, governing board management, and volunteer management among other topics.

## Objectives

✔ Survey EMS services, prehospital providers and others about EMS service issues and challenges, needs and suggestions. Use the survey to provide input to the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Utilize the EMS Services subcommittee of the EMS System Task Force to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMSTS<br>EMS services<br>EMS providers |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Develop and implement an EMS / community assessment program.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Services subcommittee | | |

✔ Develop regulatory strategies which foster quality improvement methods of developing local and regional EMS systems.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Services subcommittee | | |

✔ Develop and implement a quality improvement / technical team assessment approach to EMS system planning.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Services subcommittee | | |

✔ Develop and implement a service manager education and training program.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Services subcommittee | | |

## Future Directions - EMS Response to Disasters

Develop a database to inventory EMS resources. Employ each local EMS agency to maintain a detailed inventory of EMS resources (e.g., personnel, vehicles, and facilities) within its area and to keep this inventory as current as possible.

Develop an incident management system which enables disaster/resource information exchange between/among EMS providers, hospitals and others.

The EMS system is an integral element of disaster preparedness and planning. It plays an important role in initial response and transportation and is essential in establishing a regional disaster preparedness plan in coordination with public safety agencies, government and the medical community. Disaster response plans should be developed to address disaster management, communication, treatment, and destination of casualties. Periodic disaster drills should be conducted to assess performance, refine management, and educate personnel and the community.

To support disaster planning, mutual aid agreements need to be developed which ensure that sufficient emergency medical response, transport vehicles and other relevant resources will be made available during significant medical incidents and during periods of extraordinary system demand. There needs to be efforts to secure adequate funding for mutual aid.

## Objectives

✔ Survey EMS services about their disaster preparedness, mutual aid agreements and their challenges, needs and suggestions relative to disaster response. Use the survey to provide input into the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Utilize the EMS Services subcommittee of the EMS System Task Force to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMSTS<br>EMS services<br>EMS providers |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Develop a database of medical resources and an incident management system to support medical response to disasters.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Provide technical support in the development of mass casualty and mutual aid plans for local and regional EMS response to disasters.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Develop local, regional and statewide mutual aid agreements. Include strategies for funding and liability protections.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Develop a program to periodically exercise local, regional and statewide medical response to disasters.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Provide statewide education to EMS providers on the National Incident Management System and other disaster management training.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

✔ Conduct a needs assessment for strike team and DMAT team development in Montana and develop a strategic plan for development of teams as needed.

| action steps | time frame | participants |
|---|---|---|
| As per EMS Resources subcommittee | | |

## E. FACILITIES

**Standard**

It is imperative that the seriously ill patient be delivered in a timely manner to the closest appropriate facility. The lead agency has a system for categorizing the functional capabilities of all individual health care facilities that receive patients from the out-of-hospital emergency medical care setting. This determination should be free of political considerations, is updated on an annual basis and encompasses both stabilization and definitive care.

There is a process for verification of the categorizations (i.e., on-site review). This information is disseminated to EMS providers so that the capabilities of the facilities are known in advance and appropriate primary and secondary transport decisions can be made.

The lead agency also develops and implements out-of-hospital emergency medical care triage and destination policies, as well as protocols for specialty care patients (such as severe trauma, burns, spinal cord injuries and pediatric emergencies) based on the functional assessment of facilities.

Criteria are identified to guide interfacility transport of specialty care patients to the appropriate facilities.

Diversion policies are developed and utilized to match system resources with patient needs; standards are clearly identified for placing a facility on bypass or diverting an ambulance to another facility. The lead agency has a method for monitoring if patients are directed to appropriate facilities.

## Where We Are

There are 24 hospitals and 40 Critical Access Hospitals licensed in Montana (CAH's provide more limited but essential services to rural communities). There are several areas where hospitals are close to each other, however, most hospitals are a considerable distance from their neighboring facility, making it difficult for an ambulance service to bypass them.

**As yet, these medical facilities are not yet categorized to levels of capability**. Under trauma system development, proposed rules (due to be submitted in late June) define trauma designation levels similar to the American College of Surgeons guidelines. Under trauma legislation, the Department is also authorized to develop triage and transfer guidelines. As facilities become categorized, development of these protocols will follow.

While trauma committees frequently review case studies which point out whether the right patient is got to the right facility, there is no formal evaluation process available statewide. For most services, there is only one local facility to choose from. As the new EMS database comes online, linking between the trauma system and EMS system can occur and issues about patient triage and destination can be researched.

**Besides designation of CAHs, Rural Health Policy flex funding also addresses the improvement and integration of emergency medical services**. These monies have funded PHTLS and PEPP instructors courses and has substantially funded the EMS System Task Force activities. Proposed funding for next year will help fund EMS service medical director training. Additionally, the organization of CAH administrators have been very supportive of EMS system development activities.

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| **The medical facility needs throughout the State can best be evaluated by a categorization program which tabulates capability of all functional medical facilities. This should be done within the context of a ranking for all hospitals so that they may be included within the care system. When complete, it should be used as part of the evaluation of quality of care provided throughout Montana. Capability and categorization information study should be distributed to prehospital providers on a regular basis, possibly at the time of recertification.** | pending | Trauma system rules which allow for trauma designation are pending public hearing and adoption. |
| A useful system should be devised to accumulate outcome data so that quality of care can be assessed. This type of information to document inadequacies is essential to improving the system. | not completed | The Online Prehospital Information System will be deployed by this fall providing a system to do quality improvement. |
| Triage and transport protocols should be developed on a statewide basis if patients must go to the nearest facility in rural areas so that timely transfers may occur when necessary. | not completed | Pending trauma designation. |
| Written transfer agreements for movement of patients between facilities are needed. | not completed | Pending trauma facility designation. |
| Development of the MAF as an interval care provider in remote areas is encouraged and should be further developed and documented. | completed | Currently 40 Critical Access Hospitals in Montana. |
| Hospitals should provide patient care and medical control consistent with their resources and capabilities. | pending | |
| The hospital should be easily accessible with its routes well-marked in every community and have designated ambulance routes. | completed | |

## Future Directions

✔ Survey EMS services and hospitals about challenges, needs and suggestions relative to disaster response. Use the survey to provide input into the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Form a Facilities subcommittee to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMS services<br>CAH's<br>Hospitals<br>'trauma system' |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Develop strategies to determine if the 'right patient got to the place in the right amount of time'.

| action steps | time frame | participants |
|---|---|---|
| As per Facility subcommittee | | |

✔ Develop triage guidelines.

| action steps | time frame | participants |
|---|---|---|
| As per Facility subcommittee | | |

✔ Develop interfacility transfer guidelines.

| action steps | time frame | participants |
|---|---|---|
| As per Facility subcommittee | | |

## F. COMMUNICATIONS

**Standard**

A reliable communications system is an essential component of an overall EMS system. The lead agency is responsible for central coordination of EMS communications (or works closely with another single agency that performs this function) and the state EMS plan contains a component for comprehensive EMS communications.

The public can access the EMS system with a single, universal phone number, such as 9-1-1 (or preferably Enhanced 9-1-1), and the communications system provides for prioritized dispatch.

There is a common, statewide radio system that allows for direct communication between all providers (dispatch to ambulance communication, ambulance to ambulance, ambulance to hospital, and hospital to hospital communications) to ensure that receiving facilities are ready and able to accept patients.

Minimum standards for dispatch centers are established, including protocols to ensure uniform dispatch and standards for dispatcher training and certification.

There is an established mechanism for monitoring the quality of the communication system, including the age and reliability of equipment.

## Where We Are Now:

Montana does not have a communication plan which provides an evaluation of the current system and provides direction to the future development of a system which assures statewide EMS communications for daily needs as well as large scale multi-casualty situations.

**Despite tremendous improvements in communications technology, the EMS and hospital communications systems, as a whole, have not been updated or significantly modified since the mid-1980's**. Many hospital base stations are literally over 20 years old!! That aspect is beginning to change with the development of several Project 25 radio systems in the state. Every county in the state is part of a project planning consortium. Three consortiums are well into procurement of their systems including the Northern Tier across the entire Canadian border. It is important for EMS to be at the table of the consortiums so the their future communications needs are being met.

**The Section EMS Director serves as a Governor-appointed member of the Statewide Interoperability Executive Council (SIEC**) which provides policy-level direction in matters related to planning, designing and implementing a statewide public safety communications system. It's main goal is to build a cost shared, reliable and effective P25 standard communication system capable of providing interoperable wireless voice systems for first responders, mutual aid, and emergency medical response roles ensuring the safety and well being of all Montanans.

As mentioned earlier under the Resources Component, the Department is utilizing $500,000 in CDC and HRSA homeland security funds to upgrade ambulance and hospital communications. Many local services are also accessing funds through other channels to upgrade their communications.

**Montana has 58 public access points (PSAPs), which provide basic 9-1-1 services to 100% of Montana's population**. Nineteen PSAPs provide **enhanced 9-1-1 service** to 62% of the population and two areas have **wireless enhanced 9-1-1** capability. Since 1987, telephone companies began collecting 25 cents per telephone line for Basic 9-1-1 service and in 1997, legislation was passed that allowed them to collect an additional 25 cents per line for E 9-1-1. The funds are passed to the Department of Administration for distribution to the fifty-eight 9-1-1 jurisdictions.

The State EMS Director participates as a member of the State 9-1-1 Advisory Council which provides an opportunity for various emergency and public safety organizations, telephone company representatives, local government officials and the private sector to participate in the development, implementation and management of the State's 9-1-1 Program.

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| A comprehensive EMS communications plan is needed. It should include frequency allocation of all eligible parts of the spectrum, linkages with the state "backbone" telecommunication system, engineering assistance, requirements for emergency medical dispatch training (perhaps as a component of the new State requirement for dispatcher training), and the addition of Enhanced 911 systems. | not completed | |
| Reference National Association of State EMS Directors (NASEMSD) EMS communication planning guidelines and FCC rulemaking proposals for a national Emergency Medical Radio Service (EMRS). | not completed | |
| Telecommunications engineering assistance needs to be available to the EMS Bureau, and other parts of the system for both planning and system implementation. | available | Some telecommunications assistance is available Public Safety Services Bureau, Information Technology Services Division |
| Evaluate the use of call box systems for public access in rural and wilderness areas. | not completed | Evaluated, determined to not be feasible. |
| Require medical direction and oversight of the emergency medical dispatch function. | not completed | |

## Future Directions

The EMS system will have a communications plan which supports a communications network to provide access to the EMS system; dispatch of EMS and other public safety agencies;

coordination among EMS and other public safety agencies, access to medical oversight; communications to and between emergency health care facilities; communications between EMS and other health care providers; and outlets for disseminating information to the public.

Dispatch points (PSAPs) will have fully operational emergency medical dispatch programs. PSAPs will be integrated as a critical component to EMS data collection and system status management. Enhanced and wireless 9-1-1 will be available statewide.

Well-integrated radio, cellular and other telecommunications systems will provide robust and redundant service for both EMS purposes. There are no communications blind spots that prevent required caller access, dispatch, inter-agency, hospital notification, or medical oversight communications. All radio equipment is backward compatible and affords full interoperability among users.

EMS services will have a mobile data collection and event monitoring system. Technology such as a computer, mobile data unit (MDU), and/or personal data assistant (PDA) manages call information from dispatch, for finding the scene and to provide patient status information to the receiving hospital.

## Objectives

✔ Survey EMS services and PSAPs about challenges, needs and suggestions relative to communications and dispatch. Use the survey to solicit input into the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Form a Communications subcommittee to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMS services<br>PSAPs |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Conduct an assessment and inventory of EMS / hospital communications.

| action steps | time frame | participants |
|---|---|---|
| As per Communications subcommittee | | |

✔ Develop an EMS Communication plan which includes an inventory of EMS communications, future directions and funding strategies.

| action steps | time frame | participants |
|---|---|---|
| As per Communications subcommittee | | |

✔ Develop strategies to ensure that quality emergency medical dispatch services are available statewide

| action steps | time frame | participants |
|---|---|---|
| As per Communications subcommittee | | |

## G. PUBLIC INFORMATION AND EDUCATION / INJURY PREVENTION

**Standard**

To effectively serve the public, each State must develop and implement an EMS public information and education (PI&E) program. The PI&E component of the State EMS plan ensures that consistent, structured PI&E programs are in place that enhance the public's knowledge of the EMS system, support appropriate EMS system access, demonstrate essential self-help and appropriate bystander care actions, and encourage injury prevention.

The PI&E plan is based on a needs assessment of the population to be served and an identification of actual or potential problem areas (i.e., demographics and health status variable, public perceptions and knowledge of EMS, type and scope of existing PI&E programs).

There is an established mechanism for the provision of appropriate and timely release of information on EMS-related events, issues and public relations (damage control).

The lead agency dedicates staffing and funding for these programs, which are directed at both the general public and EMS providers.

The lead agency enlists the cooperation of other public service agencies in the development and distribution of these programs, and serves as an advocate for legislation that potentially results in injury/illness prevention.

### Where We Are Now

Montana lacks a statewide EMS public information, education, and relations (PIER) program.

**Many EMS services are involved with public information campaigns**, health fairs and injury prevention activities, but there is no coordinated, statewide EMS program to promote emergency medical services, public health and injury prevention.

**The Section's injury prevention program commenced in late 1996 with the hiring of an EMS-C program and injury prevention coordinator**. Because of EMS-C funding, this program focuses on pediatric injury prevention, but our injury prevention coordinator has been very active with a broad range of activities including suicide prevention, senior falls, fire and home smoke alarms, water safety. To date, most local EMS systems have been involved only minimally with these programs.

**Suicide Prevention Strategic Plan and Injury Prevention and Control Plans** have been developed, and are currently undergoing revision to make them more outcome oriented.

A school-based Risk Watch injury prevention was provided in 467 classrooms to over 9,600 students.

**A CDC grant-funded smoke alarm installation program** incorporates senior fall prevention safety education. To date, over 9,0000 alarms have been installed in over 2,300 homes resulting in 4 known saves and 38 other potential saves.

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| **Fund and implement a one FTE position within the EMS Bureau to conduct EMS system, injury prevention, citizen access, recruitment and retention, and related PI&E programming. With this position, support related state government efforts in public health, public safety, and emergency management.** | partially completed | The EMSTS section has dedicated a full-time position to injury prevention and EMS for Children activities.<br><br>There is no PI & E program in the Section. |
| **Fund and disseminate a frequent and regular system newsletter to system participants. Consider consolidating the communications needs of all EMS related organizations in Montana (e.g.NAEMSP, Committee on Trauma, MMA/EMS Committee, MEMSA, ENA Chapter). Consider advertising as a funding source.** | not completed | |
| The EMS Bureau should take a higher profile in the projects and programs which it sponsors or in which it participates to establish its lead agency role and recognition. | not completed | |
| Review, refine, and completely implement the 1984 PI&E plan. | not completed | |
| The EMS Bureau should be as active as possible in networking with other health and safety related organizations on PI&E projects and programs, particularly those involving legislative lobbying in which the Bureau, itself, may not directly participate. | partially completed | The injury prevention coordinator has been active in prevention and education projects and in partnering with advocacy groups.<br><br>The Trauma Care Committee has been very active in partnering on legislative and trauma system issues. |
| Organize workshops for EMS personnel on opportunities and methods for conducting local PI&E programs (e.g. seat belt and DUI, recruitment and retention, legislative advocacy for EMS system development). | not completed | |
| Develop an EMS system "fact sheet" describing the system and such attributes as number of services and personnel, hours contributed by volunteers, and money returned to the economy/tax base through morbidity/mortality reductions. | some activity not completed | |

| | | |
|---|---|---|
| Conduct an aggressive and continued campaign of PSAs and other media mechanisms to create an image, around the logo, of a competent, professional system which citizens can be proud to support, and to which providers can be proud to belong. Use these to promote volunteer and career recruitment/retention, system access, injury prevention and other messages. | not completed | |

## Future Directions

Local and statewide EMS systems proactively promote the profile of the EMS system. Local EMS systems and the State promotes the development and dissemination of information materials for the public that addresses an understanding of EMS system design and operation, proper access to the system, self-help (e.g., CPR, first aid, etc.), health and safety habits as they relate to the prevention and reduction of health risks in target areas and appropriate utilization of emergency medical services.

Along with improving public understanding of the EMS system, public information campaigns, volunteer recognition programs and other programs are conducted to encourage volunteerism and to recruit EMTs.

In communities where the need for adequate EMS staffing has been addressed, EMS is a partner with the public, private sectorand others in the community to promote injury and illness prevention activities. Programs are conducted to encourage preventive measures aimed at reducing costly emergency medical care and hospital care.

## Objectives

✔ Survey EMS services and prehospital providers about challenges, needs and suggestions relative to PI&E and injury prevention. Use the survey to solicit their input into the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Form a PI&E and injury prevention subcommittee to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMS services<br>PSAPs |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Develop and distribute public information resources to local EMS providers which inform the public about the EMS system.

| action steps | time frame | participants |
|---|---|---|
| As per PI&E / Injury Prevention subcommittee | | |

✔ Develop materials which target the potential community volunteer pool, highlighting the educational and other benefits to volunteers and the benefits to the community.

| action steps | time frame | participants |
|---|---|---|
| As per PI&E / Injury Prevention subcommittee | | |

● Develop strategies and information to support the local EMS agency, in conjunction with other partners, to promote prevention of injury and illness.

| action steps | time frame | participants |
|---|---|---|
| As per PI&E / Injury Prevention subcommittee | | |

## H. MEDICAL OVERSITE

### Standards

EMS is a medical care system that involves medical practice as delegated by physicians to non-physician providers who manage patient care outside the traditional confines of office or hospital. As befits this delegation of authority, the system ensures that physicians are involved in all aspects of the patient care system.

The role of the State Medical Director for EMS is clearly defined, with legislative authority and responsibility for EMS system standards, protocols and evaluation of patient care.

A comprehensive system of medical direction for all out-of-hospital emergency medical care providers is utilized to evaluate the provision of medical care as it relates to patient outcome, appropriateness of training programs and medical direction.

There are standards for the training and monitoring of direct medical control physicians, and statewide, standardized treatment protocols.

There is a mechanism for concurrent and retrospective review of out-of-hospital emergency medical care, including indicators for optimal system performance.

Physicians are consistently involved and provide leadership at all levels of quality improvement programs (local, regional, statewide).

## Where We Are

*"Rural EMS medical oversight often resembles a hobby; activities occur during a physician's free time and have associated costs. The benefit is the satisfaction of improving patient care beyond the physician's usual practice environment. Our goal should be to make EMS medical direction a regular, accepted component of the rural physician's broad span of health care activities."*

- Jim Upchurch, M.D., REMT-P; Indian Health Service
Rural & Frontier EMS Agenda for the Future

While Montana is very lucky to have numerous physicians who help provide oversite and input to the EMS system, there is no comprehensive program to recruit, retain, educate and compensate them for their time and expertise. There is no structure for regional medical direction and the is no State medical director.

Every Montana EMS service is encouraged to have medical direction (online and offline), but only services licensed to provide advanced life support are required statutorily to have an offline or service medical director. Just as many rural communities struggle to retain a physician for primary patient care, many services struggle to secure a physician medical director. In numerous communities, there is no local physician available or interested and those services either utilize physician assistants and other extenders as directors or they 'doctor shop' to distant communities.
Both the Billings and Kalispell areas have developed forms of regional medical direction in

order to provide service medical direction to multiple services or to provide mentoring to other local medical directors in the area.

Even while physicians in many communities have a desire to provide oversite to EMS services, there are several challenges. Many of these physicians are the only game in town and their practice is so busy, it's difficult to find the time to adequately assist with EMT training, medical oversite and quality improvement activities. As there is no comprehensive training program available to them, many are simply unsure and uncomfortable about their authority and responsibility as medical directors. Education is also needed to provide a background about EMS systems and information about data collection and quality improvement. Liability and insurance issues concern numerous physicians who provide medical direction.

**A medical director subcommittee of the Board** functions to advise the Board on medical matters related to prehospital care and to act as expert consultants on EMS issues that come before them. While they function at the Board's direction and have only the power to make recommendations, they are an important part of the inner workings of the board and their expertise is invaluable.

The subcommittee over the past couple of years has revised and updated Montana's statewide prehospital protocols, helped develop the EMT endorsement levels, developed training and protocols for the critical care endorsements, helped develop other endorsement training curriculums and assisted with developing medical director training.

The subcommittee also makes recommendations to the Board for rule and legislation.

BOME rules (appendix B), define:

- 24.156.2701 (18) ARM "On-line medical direction" is real-time interactive medical direction, advice or orders to EMTs providing patient care, and

- 24.156.2701 (19) ARM "On-line medical director" means the individual who provides on-line medical direction and who is supervised by the service medical director.

Under 24.156.2701 (20) ARM, "Service medical director" is defined as:

- an unrestricted Montana licensed physician or physician assistant-certified who is responsible professionally and legally for overall medical care provided by a licensed EMT service and/or for the training provided in an approved program/course, including all EMTs on the service or in training.

**Limited liability protection is provided for volunteer medical directors** through 50-6-317 MCA - Liability Protection (Appendix H).

(1) A physician or registered nurse licensed under the laws of this state who gives instructions for medical care to a member of an emergency medical service without compensation or for compensation not exceeding $5,000 in any 12-month period and whose professional practice is not primarily in an emergency or trauma room or ward is not liable for civil damages for an injury resulting from the instructions, except damages

for an injury resulting from the gross negligence of the physician or nurse, if the instructions given by the physician or nurse are:

(a) consistent with the protocols and the medical control plan approved by the department in licensing the emergency medical service; and

(b) consistent with the level of certification or licensure of the emergency medical services personnel instructed by the physician or nurse.

(2) An offline medical director is not liable for civil damages for an injury resulting from the performance of his duties, except damages for an injury resulting from the gross negligence of the director.

**There are no defined quality assurance requirements for licensed EMS services.** While service medical directors have a broad responsibility for the medical aspects of an EMS service, there are no policies, guidelines nor education which provide guidance about how to conduct quality assurance for EMT practice and the patient care they provide.

**Medical Director Training** - Many of Montana's physicians providing medical direction to agencies conducting EMS education and emergency medical services are not fully aware of their roles, responsibilities and authority.

The BOME is completing a web-based medical director training program that will be available early June 2005. The program provides the local medical director generalized information on the duties and responsibilities as the medical director. It also provides an over view of the design and operation of an EMS system. Materials contained in the web-based program parallel materials from both NHTSA and many physician organizations.

Also of interest is the web-based medical directors training program the Critical Illness and Trauma Foundation (located in Bozeman) is developing through a HRSA/Office of Rural Health Policy, Rural Health Outreach grant. A collaborative effort of several national organizations, this project to migrate the existing NHTSA medical director's training program to an interactive web-based format may be instrumental to meeting a Montana need.

**Entities utilizing an AED are required to have a medical supervisor** (Appendix F). This statute and it's complimentary rules require agencies and organizations who utilize an AED to obtain a licensed physician to supervise the AED program and ensure compliance with their written plan, especially relative to AED use reports. As the availability of AEDs has become so easy and widespread, the ability to inform and enforce agencies to meet these requirements has become problematic and the Department is reviewing the program for potential changes.

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| **All licensed EMS services should have a designated Medical Director who is approved by the Bureau and has been appropriately oriented to Montana EMS.** | | BOME comment: Currently all EMT providers are under medical control. All EMT-Basic providers who are functioning at an endorsement level or above (ALS providers) must have a medical director to allow them the function. All BLS providers (EMT-F thru EMT-B), have medical direction provided by the Montana Board of Medical Examiners directly and indirectly. |
| Clearly define the Medical Director's responsibilities to include a system of accountability to the service and to the Bureau. Responsibilities should include, at a minimum, the following areas (and ideally those as defined by ASTM F1149-88): protocol development and approval; monitoring of EMT competency; supervision of on-line medical direction and ongoing monitoring of the delivery of care through quality assurance review, with regular reports to the service and Bureau. | completed | BOME comment: The Montana Board of Medical Examiners has statutory authority to define, train and discipline medical directors in the State of Montana and has rules and regulations. |
| Medical Directors should receive administrative support from the local EMS service or health care facility. | generally not completed | |
| **The Bureau should have a full-time state Medical Director who oversees the activities of local medical directors, acts as a consultant to them, and is their advocate. The state Medical Director should be experienced in Montana EMS and should explore the recruitment and retention of medical directors, examine liability issues, and identify means of improving the extent of physician involvement in the EMS system.** | ongoing | BOME comment: The Montana Board of Medical Directors has passed several motions supporting a statewide medical director and most recently has passed a motion to seek legislation in the 2007 session allowing the board to hire a state medical director under the board. Current rule requires a local medical director for skills preformed above the EMT basic level, the Board functions as the medical director for all skills performed at the basic life support level |

| | | |
|---|---|---|
| There should be a permanent Medical Director Advisory Committee which addresses EMS issues at the state level and makes recommendations to the state EMS Medical Director. | ongoing | BOME Note: A medical director subcommittee of the Board functions to advise the Board on medical matters related to prehospital care and to act as expert consultants on EMS issues that come before them. The subcommittee over the past couple of years has revised and updated Montana's statewide prehospital protocols help develop the EMT endorsement levels, develop training and protocols for the critical care endorsements, help develop other endorsement training curriculums and assist with developing medical director training. The subcommittee also makes recommendations to the Board for rule and legislation. The members are active medical directors, currently 6 docs and one PA that come from Bozeman, Missoula, Great Falls, Glasgow, Hardin, Harlowton and Billings. |

## Future Directions

*"Every EMS provider service, basic life support and advanced life support, should have a medical director who is ideally a physician and has received EMS medical director training and is actively involved in EMS and system components such as protocol development, performance/quality improvement, education, and training"* Rural & Frontier EMS Agenda for the Future

Establish a statewide network of EMS medical oversight, including medical directors at the local, regional, and state level to ensure the provision of EMS medical oversight for every EMS service. Assure medical oversight is authorized by statute which provides specific authority for job descriptions, and of defined relationships among medical directors from the state to the local level. Where scarcity of physician medical directors dictates, encourage the use of physician extenders and regionalized arrangements of medical oversight.

## Objectives

✔ Survey EMS Services, prehospital providers and physicians and other medical directors about their medical direction challenges, needs and suggestions. Use the survey to provide input to the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Form Medical Director subcommittee of the EMS System Task Force to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - Utilize the BOME medical director subcommittee as the core group. Conduct strategic planning meeting. | August, 2005 | BOME medical director subcommittee<br>EMSTS<br>other medical directors as needed |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | | |
| Develop and implement workplan | | |

✔ Develop a needs assessment, job description and funding strategy for a medical directors

| action steps | time frame | participants |
|---|---|---|
| As per the Medical Director subcommittee | | |

✔ Develop education strategies for local and regional training program medical directors.

| action steps | time frame | participants |
|---|---|---|
| As per the Medical Director subcommittee | | |

✔ Develop education strategies for local and regional service medical directors.

| action steps | time frame | participants |
|---|---|---|
| As per the Medical Director subcommittee | | |

✔ Develop programs to recruit and retain medical directors including strategies for compensation, peer review protection, and liability coverage and/or protection.

| action steps | time frame | participants |
|---|---|---|
| As per the Medical Director subcommittee | | |

✔ Assure the involvement of the physicians in the design, implementation, management and provision of emergency medical care, including the EMS System Task force, BOME, and State Trauma Care Committee.

| action steps | time frame | participants |
|---|---|---|
| As per the Medical Director subcommittee | | |

# I. TRAUMA SYSTEMS

**Standard**

To provide a quality, effective system of trauma care, each State must have in place a fully functional EMS system; trauma care components must be clearly integrated with the overall EMS system.

Enabling legislation should be in place for the development and implementation of the trauma care component of the EMS system. This should include trauma center designation (using ACS-COT, APSA-COT and other national standards as guidelines), triage and transfer guidelines for trauma patients, data collection and trauma registry definitions and mechanisms, mandatory autopsies and quality improvement for trauma patients.

Information and trends from the trauma registry should be reflected in PIER and injury prevention programs.

Rehabilitation is an essential component of any statewide trauma system and hence these services should also be considered as part of the designation process.

The statewide trauma system (or trauma system plan) reflects the essential elements of the Model Trauma Care System Plan.

## Where We Are Now

**Enabling legislation was adopted in 1995 giving the Department legislative authority to develop and implement a comprehensive trauma system** (appendix E**)**. Although the legislation was an unfunded authorization, the 1997 legislature approved funding which supports a full-time trauma system manager and various system development activities. Montana's trauma system is a voluntary, inclusive system which defines a role for every medical facility.

**The Montana Committee On Trauma has been actively involved with trauma system development.** In the early 1990's, the COT was instrumental, along with numerous other physicians and organizations, in participation on the Trauma Task Force. The task force selected the first trauma register, helped develop of a State Trauma Plan and supported the adoption of the 1995 trauma legislation. Tthe chairman of the State COT as de facto chairman of the State Trauma Care Committee.

**A Governor-appointed State Trauma Care Committee** serves an advisory role the Department as well as providing state-wide coordination to regions and local areas. Organizationally, the committee is very active through several workgroups: legislation & public advocacy, injury prevention, education, information systems, quality improvement and organization. (Appendix M)

**Regional planning and implementation** occurs through the Western, Central and Eastern Trauma Advisory Committees. Based on patient referral patterns, these regions meet quarterly to plan in areas of education, EMS, quality improvement and injury prevention.

**Local trauma/EMS consultation site reviews** have been conducted in over 30 facilities with plans to visit all 60 Montana healthcare facilities.

**Education is offered in each region** with aggressive training of instructors and material support for the Trauma Nurse Core Curriculum (TNCC), Trauma Education for Rural Nurses (TERN) - an Montana-grown education program, the STN Nursing Trauma Education course, PHTLS, PEPP, GEMS and TBI courses.

The Section continues to partner with the Montana Committee on Trauma of the American College of Surgeons to sponsor **Advanced Trauma Life Support** programs. First conducted in1980, the program will conduct it's 100th course early next year. Since changing to using the Simulaid manikin for skill labs last year, the course is now co-sponsored by the three trauma regions and conducted in several areas of the state

Numerous individuals in trauma programs across the state came together several years ago develop the **Together Everyone Achieves More** (TEAM) course. This course meets the need to promote trauma system development in local communities. The program seeks to bring the entire medical community - from dispatchers to surgeons - together to discuss trauma system issues and to offer an abbreviated evaluation of their community's system status. This program has been the lead-in to more focused consultation visits in many of these communities. It has also been one of the model programs the American College of Surgeons has used to develop their "TEAM" course.

**The Education Subcommittee of the State Trauma Care Committee meets at least quarterly to plan and implement numerous trauma education issues**. The three RTACs rotate sponsorship of the annual Trauma Conference. A small amount of trauma general funds is allocated to regions each year ($5,000-$7,000 for each RTAC) for education purposes. The regions use the funds for their region-specific needs such as sponsorship of various trauma courses and stipends for local providers to conferences.

**After useing the Cale's trauma registry since 1990, Digital Innovations software was purchased in 2003.** This product was rolled out first to the larger facilities and others are now being folded in. The old Cales data has just been converted into the new software and most hospitals are either providing data to the State through the register or by paper forms (very small facilities with few trauma patients).

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| **Continue efforts to educate legislators and other health policy individuals in Montana so that enabling legislation for development of a trauma system, including trauma center designation can be passed. The functions of each categorized level of hospital care providers should be outlined to define participation of each institution in the system. There should be an all inclusive policy established so that the State can make maximal use of its provider assets throughout the State, especially the more sparsely populated areas. Triage and transfer protocols should be mandated on a statewide basis as part of the legislation. Trauma center designation should include requirements for trauma team availability, and the legislation should include a timetable for implementation of a mandatory autopsy law.** | partially completed | Rules allowing a program for designation of trauma facilities will be published in late June and adopted in August. |
| Continue development of a statewide trauma registry. | ongoing | Montana uses the Digital Innovations software in larger facilities. Information from small facilities is extracted on paper and entered into the trauma register by the State. |
| Devise systems for outcome assessment and quality improvement using the peer review process. | ongoing | |
| Continue educational efforts for trauma care providers at all levels. | ongoing | |
| Develop statewide prevention programs based on needs apparent from the registry data. Include in these programs a means for measurement of effectiveness. | ongoing | |

## Future Directions

Through the guidance and advise of the State Trauma Care Committee, RTACs and others, continue to develop and evaluate a comprehensive Trauma System. For the purposes of the EMS System Task Force and EMS system development, utilize the State Trauma Care Committee for development and implementation towards trauma system development.

## Objectives

✔ Survey EMS services, hospitals and others about trauma system develoment challenges, needs and suggestions. Use the survey to solicit their input to the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |

| | | |
|---|---|---|
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Develop and implement through the State trauma system structore.

| action steps | time frame | participants |
|---|---|---|
| As per the Medical Director subcommittee | | |

## J. EVALUATION

**Standard**

A comprehensive evaluation program is needed to effectively plan, implement and monitor a statewide EMS system. The EMS system is responsible for evaluating the effectiveness of services provided victims of medical or trauma related emergencies, therefore the EMS agency should be able to state definitively what impact has been made on the patients served by the system.

A uniform, statewide out-of-hospital data collection system exists that captures the minimum data necessary to measure compliance with standards (i.e., a mandatory, uniform EMS run report form or a minimum set of data that is provided to the state); data are consistently and routinely provided to the lead agency by all EMS providers and the lead agency performs routine analysis of this data.

Pre-established standards, criteria and outcome parameters are used to evaluate resource utilization, scope of services, effectiveness of policies and procedures, and patient outcome.

A comprehensive, medically directed statewide quality improvement program is established to assess and evaluate patient care, including a review of process (how EMS system components are functioning) and outcome. The quality improvement program should include an assessment of how the system is currently functioning according to the performance standards, identification of system improvements that are needed to exceed the standards and a mechanism to measure the impact of the improvements once implemented.

Patient outcome data is collected and integrated with health system , emergency department and trauma system data; optimally there is linkage to data bases outside of EMS (such as crash reports, FARS, trauma registry, medical examiner reports and discharge data) to fully evaluate quality of care.

The evaluation process is educational and quality improvement/system evaluation findings are disseminated to out-of-hospital emergency medical care providers.

The lead agency ensures that all quality improvement activities have legislative confidentiality protection and are non-discoverable.

## Where We Are Now

**Montana is on the verge of implementing an EMS information and quality improvement program**. Other than the trauma register, there is little healthcare data available to document and evaluate patient care. While many EMS services around the state collect rudimentary run data, most do not have a method to collect patient care information that can be used for quality improvement and system evaluation.

**The patient care record module of Montana Health Information and Resource Management System (Montana HIRMS)** (Appendix N) is due to roll out by sometime this summer. This system is an integrated, functional and economical plan to collect healthcare and resource information and to utilize this data and information for day-to-day management, system evaluation and resource management. Additionally, Montana HIRMS will be utilized to manage this information for surveillance and incident management in local, regional and statewide disaster management.

**Through the Montana Highway Traffic Safety Office**, numerous agencies who collect data and information are collaborating to evaluate the wealth of traffic and health information which could be integrated for system evaluation and policy development.

**A study to investigate the feasibility and ability to collect and link several disparate public health databases** to evaluate the public health impact of injuries and acute non-infectious disease conditions was conducted in 2003. With the cooperation of several EMS services, hospitals, Highway Traffic Safety and the Department, the project attempted to link EMS, trauma, highway crash and Medicaid databases. The project was able to demonstrate that the LinkSolv software could probabilistically link these databases, but project's short timeframe didn't allow for comprehensive data analysis.

**Progress on Meeting 1991 Recommendations:**

| NHTSA Recommendation | Status | Comments |
|---|---|---|
| **Develop a comprehensive, statewide EMS evaluation system using the components contained in this report. Dedicate specific Bureau staff and administrative support to this end.** | ongoing | |
| Mandate a standard state reporting form for data collection. | not completed | |
| **Require submission of specific data to the State.** | partially completed | Rules are in place which require submission of data , but they have never been enforced due to lack of staff and a system to manage this. |
| Analyze state data to evaluate resource allocation. | not completed | |
| **Each service should evaluate their delivery of care in relation to patient outcome to determine effectiveness. Such evaluations should be fed back to the providers and reported to the State.** | not completed | |
| Use evaluations to identify areas of training deficiency. | not completed | |
| All EMS quality assurance evaluations must be immune from legal discovery. | not completed | |
| Evaluation results should be used to educate legislators, physicians, and providers. | not completed | |

## Future Directions

A comprehensive prehospital data system is implemented by all EMS services for patient records and performance improvement. All prehospital patient care data collection is implemented using the National EMS Information System (NEMSIS) standards. As much as possible, all data collection will be electronic and there is a mechanism to collect data in a near real time basis for patient management, patient care improvement, and system management.

Utilize the data system to establish an EMS quality assurance/quality improvement (QA/QI) program to evaluate the response to emergency medical incidents and the care provided to patients. Implement programs to address evaluation and improvement of the entire EMS system, including all pre-hospital provider agencies and hospitals. Also address compliance with policies, procedures and protocols; identification of preventable morbidity and mortality; and utilization of state standards and guidelines.

Communications, medical devices and the data systems are integrated and linked to make use of real-time Geographical Information Systems, mapping, patient tracking and resource management.

To the extent possible, link and integrate EMS data with other existing and planned databases (e.g.: trauma, traffic crash, insurance, etc.) and make data and reports available for system planning, prevention and program management activities.

Ensure patient confidentiality at all levels of data access/transfer, assure compliance with HIPPA regulations and develop statutory protection which addresses peer review and discoverability concerns.

## Objectives

✔ Survey EMS services and prehospital providers about EMS information and data collection challenges, needs and suggestions. Use the survey to solicit their input into the EMS System plan.

| action steps | time frame | participants |
|---|---|---|
| Develop a survey instrument. | July, 2005 | |
| Distribute the survey. | July, 2005 | |
| Collate and report the survey back out to all stakeholders. | August, 2005 | |
| Per the EMS task force, incorporate objectives into the EMS Plan | August, 2005 | |

✔ Form an Information subcommittee of the EMS System Task Force to help provide direction, prioritization and consensus towards goal and objectives.

| action steps | time frame | participants |
|---|---|---|
| Form committee - conduct initial meeting | August, 2005 | EMSTS<br>BOME<br>EMS services<br>EMS providers |
| Develop goal, objectives and priorities - incorporate into the EMS System Plan | August, 2005 | |
| Develop and implement workplan | | |

✔ Implement the Online Prehospital Information (OPHI) system and other modules of the Montana Healthcare Information and Management System (Montana HIRMS).

| action steps | time frame | participants |
|---|---|---|
| As per Information subcommittee | | |

✔ Develop legislative strategies to protect data from discoverability and to support peer review / quality improvement activities.

| action steps | time frame | participants |
|---|---|---|
| As per Information subcommittee | | |